New Jersey's Clean Energy Program™
Fiscal Year 2021 Program Descriptions and Budget

Energy Efficiency and Renewable Energy Program Plan Filing

FY21 Compliance Filing
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Introduction

This Fiscal Year 2021 ("FY21") Compliance Filing presents the program plans, budgets, and anticipated savings of the initiatives of *New Jersey's Clean Energy Program*™ ("NJCEP").[1]

Administered through the Division of Clean Energy, NJCEP is a signature initiative of the New Jersey Board of Public Utilities ("BPU" or "Board") that provides financial incentives and support for energy efficiency technologies, distributed energy resources, and solar renewable energy.

Budgets

Budget information for the programs implemented by the TRC Team ("TRC") can be found in Appendix E: Program Budgets.

All budgets set forth in this Compliance Filing are subject to State appropriations law, and all incentive offerings are subject to availability of funds.

Savings Goals

Energy savings projections for the programs implemented by TRC can be found in Appendix F: Program Goals and Performance Metrics.

[1] This Compliance Filing only addresses programs implemented by TRC. NJCEP funds are also directed to other state energy programs not implemented by TRC and, therefore, are not addressed in this filing.

Table References

Residential Energy Efficiency Programs

General Overview

NJCEP offers a broad range of opportunities for New Jersey's homeowners and tenants living in single family and multi-family homes to save money by making their homes more energy efficient. NJCEP ensures that reasonably priced efficient lighting and appliance choices are available when new products are being purchased. The program works with homebuilders to support the incorporation of energy efficiency into the design and construction of new homes. In addition, the program builds the capacity and capability of market participants to safely and effectively upgrade the efficiency of existing homes through Home Performance with ENERGY STAR®. This Compliance Filing provides program descriptions, goals, and budgets for the residential energy efficiency programs implemented by TRC. Detailed information regarding each of these programs follows.

Existing Homes: Residential Gas & Electric HVAC Program

"New Jersey *WARM*Advantage & *COOL*Advantage"

Program Purpose and Strategy Overview

The purpose of the New Jersey Residential Gas & Electric Heating, Ventilation, and Air Conditioning ("HVAC") Program ("HVAC Program") is to increase the selection and quality installation of high efficiency residential HVAC equipment in the New Jersey market through the use of incentives, supply chain support, and customer outreach and education. The Team will work with the HVAC supply chain to generate increased recognition of the business opportunities that exist for New Jersey's HVAC contractors to expand their services into the "whole-house" residential retrofit market as more fully described in the *Home Performance with ENERGY STAR* section of this filing. Effectively making significant reductions in the amount of energy used in homes requires a comprehensive approach that addresses HVAC equipment and the insulation and air leakage characteristics of the building shell, as well as, lighting and plug loads. HVAC contractors have historically focused their businesses on the equipment sales and installation. However, opportunities exist to expand HVAC business practices to include building shell improvements and to support partnerships between HVAC and building shell contractors that will result in comprehensive home energy savings for New Jersey's residents.

To build towards these more comprehensive approaches, the HVAC Program will work in close coordination with the Home Performance with ENERGY STAR Program to promote quality installation services under similar technical standards to customers who may not be ready to undertake comprehensive improvements all at once. The HVAC Program offers a phased, step-by-step approach to improving the energy efficiency of their homes.

Program Description

The *WARM*Advantage and *COOL*Advantage Programs incentivize customers to purchase high efficiency HVAC equipment. The Programs are designed to make the quality installation of high efficiency residential HVAC equipment an easy choice in the New Jersey market. HVAC contractors are the primary vehicles for promoting the program. With the aid of the Program incentives, they complete the sale and subsequently deliver quality installations of high-efficiency equipment.

As with other market areas, efficient HVAC options continue to evolve as technology advances. As HVAC equipment becomes even more efficient through this evolution the Program must continue to address market barriers to achieve its goals. While the barriers listed below appear unchanged, it is important to note that the efficiencies of the systems are increasing:

- High upfront incremental cost of super high-efficient systems with incrementally smaller energy savings compared to readily available minimum efficiency systems;
- Consumers' inability to differentiate, and therefore, value the difference between good and poor quality HVAC installation resulting in challenges faced by contractors who are trying to sell higher-cost quality installations;
- Consumers' lack of information and awareness of the benefits of both energy and non-energy efficient equipment and quality installations, particularly during repair, renovation, and remodeling;

- HVAC contractor perception of low value and/or sense of difficulty about program participation;
- HVAC contractor unwillingness to voluntarily participate in the program and fulfill the program's requirements for successful application submission due to lack of consumer demand; and
- On-going training needs for HVAC contractors on key installation issues, including proper installation methodologies, proper unit sizing and utilization, and health and safety issues including proper venting of equipment.

The Program employs several key strategies to address these barriers:

- Financial incentives for the purchase of energy efficient cooling, heating, and water heating equipment meeting or exceeding the performance criteria of national and regional standards such as ENERGY STAR and Consortium for Energy Efficiency (CEE) specification tiers;
- Information aimed at consumers to help them make better energy saving purchase decisions, which also provide better comfort, health and safety.;
- Utilization of the Outreach Team to promote high efficiency equipment with an emphasis on promoting through distributors/manufacturers;
- Sales training for contractors (i.e. how to sell energy efficiency);
- Technical training for HVAC contractors on (i) quality installation practices (including the use of Manual J & S for proper sizing and selection of equipment); and (ii) health and safety concerns regarding orphaned gas appliances; and
- Collaboration with regional and national efforts to amplify program influence with support for market-wide initiatives (such as emerging technologies & specification revisions) that advance the interests of the program.

NJCEP will continue to support efforts, where technically and economically justifiable, to upgrade federal appliance efficiency standards. When necessary, the Program also provides technical support for the development of such upgrades, tracking and monitoring developments, and review and modification of program designs to integrate changes to the standards and codes.

Target Market and Eligibility

*COOL*Advantage promotes the installation of new, energy efficient, residential electric air conditioners and heat pumps. The *COOL*Advantage Program covers conventional central and mini-split air conditioning and air source heat pump systems. It also offers an incentive for cold climate Air Source Heat Pumps (ccASHP) and air-to-water heat pumps. This comprehensive offering enables the Program to accelerate market adoption of recent technology improvements such as inverter-driven compressors and advanced controls that enable significantly greater heating and cooling performance by heat pumps.

*WARM*Advantage promotes energy efficient natural gas-fired furnaces, boilers, water heaters, and associated equipment for use in residential buildings. The *WARM*Advantage Program specifically addresses water heating units that are not planned to be replaced when a furnace is replaced, which can pose a combustion appliance safety issue for the customer by offering additional incentives to participants that change both heating and water heating units at the same time. This is an industry-

leading program design that safeguards customers and delivers greater energy savings through the program.

Program Requirements

Contractors are strongly encouraged to utilize a HVAC Contractor **online portal** to submit applications and check the status of applications in process. A recorded webinar training and the online portal are located at: www.NJCleanEnergy.com/HVACPORTAL. An online portal is also available for applicants to electronically submit applications and check the status of an application in process at the same location.

The Program currently requires that certain documentation be provided to support each incentive application. The documentation requirements are set out in detail in the Program Guide, applications, website, and/or other program documents.

Offerings and Incentives

COOLAdvantage

The *COOL*Advantage Program will offer incentives for central and mini-split air conditioners and heat pumps meeting or exceeding the performance criteria of national and regional standards such as ENERGY STAR® and CEE specification tiers.

By supporting equipment that performs efficiently at times of peak electric demand, the *COOL*Advantage Program's rebates help reduce the costs associated with meeting that demand. Performance levels are aimed to align with the levels established by national and regional specification-setting organizations such as ENERGY STAR and CEE, as appropriate for the New Jersey market. If new program requirements, procedures and/or incentives are proposed at any time, they will take effect after a notification period is provided to program participants (i.e. contractors, etc.) and posting at njcleanenergy.com. Any completed applications received after the notification period will be subject to new program rules. Rebate applications for cooling system equipment purchased prior to the end of the notification period will continue to be processed. Contractor and customer outreach and education on the benefits of efficient HVAC equipment and quality installation practices will continue to be supported. There is a great market potential in New Jersey for the mini-split systems. Incentives offered through the *COOL*Advantage Program can be found in Appendix A.

WARMAdvantage

The *WARM*Advantage Program will offer incentives for efficient furnaces, boilers and hot water heaters. The *WARM*Advantage Program will continue to offer an incentive to promote the combined upgrade of qualifying space and potable water heating equipment, as well as, combination equipment with the goal of achieving greater savings and facilitating the appropriate treatment of any potential combustion appliance safety issues. Incentive levels offered through the *WARM*Advantage Program can be found in Appendix A.

Any HVAC incentives available for State Energy Program ("SEP") participants will be identical to those provided by NJCEP for similar equipment when funds are available. *COOL*Advantage and *WARM*Advantage Program incentives will be paid directly to homeowners or assignable to contractors by written consent.

Cooperative Marketing

The Cooperative Marketing Incentive offers cost-sharing for pre-approved advertising placed by contractors participating in the HVAC, Home Performance with ENERGY STAR ("HPwES"), and Residential New Construction ("RNC") Programs. More details are set forth in the Residential New Construction, Incentives subsection of this Compliance Filing.

Planned Program Implementation Activities for FY21

The following program implementation activities will be undertaken in FY21:

- Provide monetary incentives and education to participants to simultaneously replace both heating and domestic water heating systems with high efficiency equipment to safeguard against potential combustion appliance safety issues;
- Support the training of HVAC contractors and technicians on the proper calculation of heating and cooling loads, system selection and design, installation techniques, and consumer benefits of high efficiency heating and cooling equipment and/or any other substantial form of training that is directly related to the promotion of energy efficiency and quality equipment installation. The Program will also support training in the recognition and proper techniques to deal with atmospherically drafted, orphaned water heaters that can result from boiler or furnace replacements;
- Coordinate with utilities to ensure program offerings complement each other with the intent to harmonize incentives offered by all parties;
- Work with NJIT to develop an online HVAC Orientation training to introduce the HPwES Program to HVAC contractors. This online training will be offered to all NJ HVAC contactors interested in growing their business beyond HVAC work.

Quality Control Provisions

The Program Manager maintains documented policies to ensure consistency in the processing and quality control for all incentive program participants. The qualifying equipment efficiency rating on applications received will be verified. Qualifying equipment efficiency levels are verified with the AHRI, AHRI/CEE directory of air conditioning and heat pump equipment, eligible products list from ENERGY STAR, or compared against the performance criteria listed in each appliance category. Information on applications received is entered into a database that checks for duplicate applicants through an equipment serial number comparison.

On an ongoing basis, units from both WARM and COOL*Advantage* Program applications are randomly selected for an in-depth quality control review and inspection. Quality Control includes a paperwork review of the application and a field inspection to verify qualifying equipment installations and proper installation. A field inspection report is prepared for each inspection.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Existing Homes: Home Performance with ENERGY STAR Program

Program Purpose and Strategy Overview

Homes use a variety of energy sources, including electricity, natural gas, fuel oil, propane, and/or wood, for a variety of uses. Looking at homes comprehensively across all of these energy sources and end uses provides the greatest opportunity to save the most energy. It is, however, a complex process that requires specialized training, which is often beyond the scope of knowledge of most home improvement contractors. Similarly, while the average homeowner may want to reduce energy costs, specialized assistance would be required in order for the homeowner to obtain the necessary information to determine the means for significant savings.

HPwES is a national home efficiency improvement program administered by the U.S. Department of Energy ("DOE"). The HPwES Program supports the development of a qualified and robust contractor network, contributing to local job growth and boosting local economies. The HPwES Program encourages contractors (primarily insulation contractors, HVAC contractors, and remodelers) to pursue an integrated, "whole house approach" to energy efficiency and home improvement providing customers comfort, while making their homes healthier and safer. Participating contractors must meet the Building Performance Institute ("BPI") GoldStar Contractor Program requirements. BPI certifications are based on national standards that ensure home assessors have the skills required to identify and realize savings opportunities following industry best practices. As such, it is a market transformation program aimed at raising the technical standards for trade allies working in the home improvement market. It also offers interested customers the opportunity to undertake comprehensive energy efficiency projects by working with a group of certified contractors to maximize savings through the use of information and expertise not possessed by customers.

Since the HPwES Program's purpose is primarily long-term market transformation, it is challenged to meet standard cost-effectiveness criteria used for programs that are designed only to achieve near-term savings. Its value in creating both the expertise and infrastructure to achieve comprehensive home energy savings and the direct benefits to homeowners who participate is not well measured using the various cost benefit tests, but is nevertheless a significant piece of the total lifetime savings contribution to the New Jersey's energy efficiency program portfolio.

Program Description

Over the past several years, the HPwES Program has provided information, education, and incentives directly to participants to encourage them to make energy efficiency improvements to their homes. The HPwES Program has also provided contractors with the training and the BPI GoldStar Contractor Program qualifications necessary to consistently achieve comprehensive energy savings. The HPwES Program has successfully trained and approved over 200 BPI accredited /GoldStar qualified contractors, yet, market barriers to achievement of greater numbers of comprehensive home retrofits persist, such as:

- High upfront cost of implementing a comprehensive retrofit package;
- Consumers' inability to differentiate, and therefore, value the difference between good and poor quality HVAC installation;

- Consumers' lack of information and awareness about the Program's available incentives and the benefits in both energy and non-energy of a "whole-house" approach to saving energy, resolving health and safety issues, and improving home comfort;
- The home improvement industry's negative perception of the HPwES program stemming from, the requirement for performance of comprehensive work; the absence of guaranteed multi-year program funding; and the slow payment timelines that lead to contractor cash flow issues; and
- Limited availability of trade allies with qualified skilled employees who are invested in the HPwES Program.

The HPwES Program will continue to serve homes and multifamily units through a combination of:

- Robust, performance-based incentives for energy efficiency improvements to both participants and contractors;
- Zero percent and low interest loans to qualified participants through participating NJ utilities or directly through the HPwES Program;
- Partnerships with trade allies to bridge the gap between the HVAC and HPwES Programs by focusing on the alignment of the technical standards of both programs;
- Contractor training on program and technical topics, and partial reimbursement for annual BPI GoldStar Contractor Program fees;
- Quality Assurance inspections that are conducted to ensure that participants receive contracted energy efficiency services based on BPI national standards;
- Effective relationships with NJ's investor owned utilities to leverage additional resources and offers; and
- Outreach efforts focused toward the remodeling industry to recruit remodeling trade allies informing them about the program's available incentives and identifying potential partnerships.

To initiate participation in the HPwES Program, a customer requests an assessment performed by a NJ HPwES-participating BPI GoldStar contractor. Contractors also market the program directly to customers, and encourage customers replacing heating and air conditioning equipment to undertake comprehensive efficiency improvements at the same time. The assessment includes recommendations for appropriate energy efficiency improvements relevant to the home and checks for health and safety issues. Contractors are trained to promote the installation of comprehensive energy efficiency improvement measures, which may be eligible for program and financing incentives based on the savings estimated for the recommended work scope.

Participating contractors must employ properly trained staff and must allow inspection by TRC of the work performed to ensure all measures are properly installed and safety precautions are observed. Only contractor firms that are GoldStar Qualified by BPI may participate in the program. The BPI GoldStar requirements regarding contracting company qualifications provide assurance to both participants and the HPwES Program that contractors are competent, that all cost-effective savings opportunities have been identified, and that any health and safety considerations are also included in the report of recommended actions. Participating contractors must guarantee all work and abide by BPI standards governing health and safety, work quality, insurance coverage, customer service, and complaint resolution.

Target Market and Eligibility

The HPwES Program is designed to serve existing New Jersey households across all income categories, but particularly targets the broad market not eligible for low-income program services. The HPwES Program targets customers served by an investor-owned utility that reside in existing one, two, three and four-family homes, either attached or detached, and multifamily buildings that are three stories or less.

Multifamily Buildings

Small multifamily building developments may participate in the HPwES Program. The HPwES Program defines eligibility as buildings that are:

- No more than three stories high;
- Have single ownership;
- Can provide whole building energy usage data either for (a) individual dwelling units' mechanical systems, or (b) a mechanical system serving the entire building (but not more than a single building, i.e., not a central heating plan serving multiple buildings); and
- Made up of five or more units in a single building or multiple buildings (each with five or more units) within a single geographic boundary and with a single property ownership/management structure.

Multifamily facilities that do not meet these criteria may receive services through commercial and industrial ("C&I") Programs described later in this filing.

The total incentive amount for a multifamily project must not exceed 50% of the total costs of approved measures. If the total multifamily project incentive based on the above structure yields an amount greater than 50% of the costs of approved measures, the incentive amount offered will be lowered to the 50% maximum.

The program work scope **must** utilize a whole building approach to be approved. Individual units within a multifamily structure or development are not eligible for the HPwES Program unless the whole building is served. However, they may take advantage of other NJCEP offerings, such as the *WARM* and *COOL*Advantage Programs.

Townhouses, as defined by the New Jersey Residential Code[2], and when individually-owned, are considered single-family homes. Therefore, the same incentive levels given to single-family homes will apply.

The HPwES Program works with the contractors of multifamily projects to ensure proper project assessment and approval processes. Multifamily buildings are addressed in accordance with the BPI Multifamily Building Standards. The HPwES Program only approves such projects for contractors that have at least one staff member holding BPI Multifamily certification.

[2] NJ IRC R202: Townhouse: A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from foundation to roof and with open space on at least two sides

Program Incentives

Two types of incentives are offered by the program:

- Customer incentives and loans to make home retrofit projects more affordable and encourage customer participation and energy savings; and
- Contractor incentives to encourage contractor participation and deliver projects that provide energy savings and comfort, as well as, healthy and safe homes.

Further, incentives are structured to promote comprehensive savings with the highest incentive offered for the greatest energy savings in addition to accommodating those who participate in other NJ energy efficiency programs. For example, it is possible for a customer to install properly sized, efficient HVAC equipment and receive *WARM* and/or *COOL*Advantage and utility equipment rebates, then at a later date install thermal envelope measures (such as air sealing and insulation) through the HPwES Program, or vice versa. Participants are free to choose from among the comprehensive work scope recommendations provided by the participating program contractor. The incentive structure is intended to reward participants who pursue the highest possible savings. Similarly, contractors are rewarded for promoting a comprehensive set of recommendations.

The HPwES Program's tiered incentive structure has been maintained. The savings estimates will be determined by use of the HPwES Program's software tool. BPI GoldStar Contractor Program requirements will be enforced including (a) the prohibition against performing air sealing work without first addressing relevant health/safety issues such as failing spillage/back draft testing; and (b) requiring mechanical ventilation to ensure adequate indoor air quality to meet ASHRAE and BPI ventilation requirements.

The incentive tables for the Existing Homes program can be found in Appendix A.

Cooperative Marketing

The Cooperative Marketing Incentive offers cost-sharing for pre-approved advertising placed by contractors participating in the HVAC, HPwES, and RNC Programs. More details are set forth in the Residential New Construction, Incentives subsection of this Compliance Filing.

Planned Program Implementation Activities for FY21

The following program implementation activities will be undertaken in FY21:

- Continue providing customer and contractor incentives for HPwES projects as described above;
- Continue to work with the NJ utilities to offer 0% or low interest loans or on-bill repayment, and to leverage these and any other applicable utility incentives. As mentioned in the HVAC section, coordinate with the utilities to ensure programs offer complementary incentives to increase overall participation;
- Continue to work with the current lenders to offer 0% and low interest loan options. The loan options for HPwES are offered to any program participant where a utility loan or on-bill repayment program is not available;
- Continue implementation of automated processes that reduce administrative costs and remove some of the paperwork requirements to simplify and ease contractors' participation;

- Offer New Jersey BPI annual GoldStar Contractor Program reimbursements for all participating GoldStar contractors who have completed at least 10 projects during this fiscal year. The New Jersey BPI GoldStar Contractor Program fee reimbursement will be 25% of the annual New Jersey BPI fee and will be processed upon presentation of the contractor's paid invoice showing the full amount of the GoldStar annual fee;
- Support the HPwES contractors by providing sales and business practice support/trainings to help contractors learn how to best sell HPwES features and benefits to homeowners, in addition to, technical trainings to improve contractors' technical skills and support them in meeting the continuing education requirements for BPI certification;
- Continue to evaluate new technologies and installation practices;
- Continue to engage with potential partners and stakeholders, including insulation contractors, remodelers, real estate industry professionals, Sustainable Jersey, distributors, and suppliers to increase program awareness and participation;
- Work with NJIT to finalize an online "residential journey" which will take a customer through a decision tree helping them identify energy savings opportunities, determine their priorities, and navigate through the suite of residential programs offered by NJCEP;
- Continue to pilot a basic entry level opportunity for insulation contractors to perform air sealing and insulation measures with prescriptive incentives (mirrors current *WARM*/*COOL*Advantage Programs but with a focus on envelope measures) to engage insulation and remodeling contractors, and increase customer participation. The incentive tables for the pilot component can be found in Appendix A. Detailed requirements for this opportunity are set out in detail in the website and/or other Program documents;
- Continue to pilot a residential Direct Install component to the HPwES Program (LEDs and water conservation measures) to capture additional savings, including for fuel saved as a result of water use reductions. The incentive tables for the pilot component can be found in Appendix A. The major elements of the pilot component are set forth immediately below:
    - The measures to be installed would consist of at least nine (9) items selected by the contractor and/or consumer from a published list of eligible measures;
    - Only the HPwES program's accredited and certified contractors may participate; and
    - Available only as part of an eligible HPwES project.

Quality Control Provisions

The HPwES Program will continue to promote BPI's quality management system process to the participating contractors providing feedback in response to technical reviews of energy modeling, submitted documents, and/or field inspections of completed projects. The HPwES Program performs Quality Assurance Inspections of a percentage of all jobs completed. Typically, there is a high inspection rate for the first approximately 10 jobs that each new contractor performs with the percentage dropping for subsequent jobs in inverse proportion to the level of contractor performance. These inspections assure that contractors maintain the high-quality standards expected of them and guard against misuse of program funds. If a job or an important aspect of the job fails to meet program requirements, a Quality Assurance Inspection Report will be given to the contractor which details the necessary corrective action that must be taken. Once the corrective work is done, a Quality Assurance Inspection Report must be signed by the contractor and customer and sent to the program. A re-inspection may be scheduled to ensure compliance.

The HPwES Program team will continue to work with contractors to resolve inspection failures as quickly and reasonably as possible.

The integration of these procedures, along with reducing contractor incentive for failed QA inspections to lower the overall percentage of projects that must receive an inspection from the Program while recognizing and rewarding high performing contractors, is anticipated to significantly reduce overall Program administration costs.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Residential New Construction Program

Program Purpose and Strategy Overview

The RNC Program is designed to increase the energy efficiency and environmental performance of residential new construction buildings (single and multifamily) in New Jersey. The RNC Program has the long term objective of transforming the market to one in which a majority of residential new construction in the state is "net zero-energy" (i.e., extremely efficient buildings where low energy needs can be met by renewable energy generation.)

The RNC Program strategy is to establish technical standards for energy efficient new construction in New Jersey utilizing nationally recognized platforms, including the EPA ENERGY STAR® Certified New Homes Program, EPA ENERGY STAR Multifamily High- Rise ("MFHR") Program, EPA ENERGY STAR Multifamily New Construction ("MFNC") Program, and U.S. Department of Energy (DOE) Zero Energy Ready Home ("ZERH") Program. The RNC Program then provides technical support and incentives to home energy raters, architects, trade allies, builders and homebuyers to enable them to design, build, and purchase homes that comply with these standards.

Using an account management approach, the RNC Program recruits new and supports existing energy professionals who oversee the energy efficiency work completed by participating builders. There are two paths for energy professionals to participate: (i) as a Home Energy Rating System ("HERS") Provider approved by an EPA-Approved Verification Oversight Organization ("VOO"); and (ii) as a Modeler approved by an EPA-Approved Multifamily Review Organization ("MRO"). Those approved through either path are generally, and in this Compliance Filing, referred to as "raters" or "rating companies." The RNC Program is focusing on building stronger relationship with the participating builders through the development and use of a Builder's Participation Agreement clarifying the builders' relationship with the RNC Program, the use of account managers to provide more direct support to the builders, and the use of the Outreach Team to recruit new builder participants with an emphasis toward ZERH Program projects. The RNC Program also provides the necessary training to raters, trade allies, and builders to ensure they understand the program rules/requirements, and have the skill set to meet the higher-than-code program standards to build homes that contribute to New Jersey's energy reduction efforts. Incentives are offered both to partially offset the incremental construction costs associated with building higher efficiency homes and to generate interest and enthusiasm for the RNC Program among builders and homeowners.

Program Description

The RNC Program is market-based and relies on builders and raters to build to nationally recognized platform standards, which are defined by core efficiency measures, energy modeling, rater and builder oversight, and checklists to ensure quality installation.

To participate in this RNC Program, HERS Raters must use modeling software approved by the Program to model savings, calculate the Energy Rating Index ("ERI") and MMBtu incremental

savings compared to the User Defined Reference Home ("UDRH").[3] To be approved, the software must be accredited by an EPA-Approved VOO and be capable of providing batch reporting, including building components for QA review of rating files and savings utilizing the UDRH.

There are a number of market barriers to efficiency investments in new construction in New Jersey. Key among these are:

1. Builders do not always see the value of the additional administrative procedures and associated costs of ENERGY STAR;
2. The higher incremental cost associated with the additional rater administrative and field inspection requirements of a ZERH;
3. Builders and designers are not proficient with the energy code requirements that the RNC Program requires them to meet or exceed;
4. Conflicting motivations guiding design criteria and choices (i.e., builders who make design, procurement, and construction decisions do not pay the homeowners' operating costs associated with those decisions);
5. Lack of local market awareness regarding the benefits of efficiency and environmental performance on the part of consumers, builders, lenders, appraisers, realtors and others;
6. Limited technical skills on the part of some builders and their trade allies to address key elements of efficiency;
7. Lack of local consumer marketing on the benefits of owning a RNC Program-participating home to drive demand;
8. Limited awareness of the ZERH requirements, benefits, and incentives that are available to support that market segment; and
9. Inability of consumers, lenders, appraisers, and others to differentiate between efficient and standard new construction homes.

The RNC Program employs several key strategies to overcome these barriers including:

- Direct financial incentives to builders of homes that meet program standards;
- An incentive to offset the incremental rater cost associated with certifying a ZERH single-family or multi-single home;
- Multiple pathways that allow participation across efficiency levels, entice new builders to the RNC Program, support the NJ construction market for energy code, and promote increased efficiency and quality-assurance with higher incentives;
- Utilization of nationally recognized EPA ENERGY STAR and DOE ZERH brand and website to help promote residential energy programs;
- Technical assistance to inform builders and their trade allies on details of the program pathways and how to comply with the rigorous performance requirements; and
- ENERGY STAR and ZERH certification, inspections, and testing through third-party rating companies that compete in an open market for services.

[3] I.e., a baseline home which, among other things, is defined and used in the NJCEP Protocols to Measure Resource Savings.

Program Participation Pathways

The following participation pathways provide New Jersey's builders and homeowners with a range of participation options to suit builders at different levels of experience with energy efficient construction techniques and homebuyers with varying interest and budgets. All are based on the presumption that the IECC 2009/2015/2018 energy code sets the minimum energy performance requirement for newly constructed homes. Therefore, they all result in energy performance that is better than that required by IECC 2009/2015/2018, as applicable, depending on the home's permit date.

ENERGY STAR Home

Builders that enroll in this pathway will satisfy the requirements for ENERGY STAR certification utilizing the Performance Path by way of the ERI, including full inspection checklist requirements. This pathway includes ENERGY STAR Version 3.0 or 3.1, depending on the date of the applicable building permit for single-family and multi-single homes. The incentive structure within this segment will include a base incentive plus a performance incentive using MMBtu saved as compared to the applicable code UDRH as the indicator.

Zero Energy Ready Home (ZERH)

This pathway recognizes a higher energy efficiency achievement in new home construction. Program requirements include meeting or exceeding all DOE ZERH[4] technical standards, building in compliance with the ENERGY STAR Homes Program and all checklists, meeting 2015 IECC insulation levels, and certifying under EPA's Indoor airPLUS Program. The incentive structure within this pathway will include a base incentive plus a performance-based incentive using MMBtu saved as compared to the applicable UDRH as the indicator.

Zero Energy Home +RE (ZERH+RE)

This pathway has the same requirements as the ZERH pathway with the additional requirement that 100% of the building's modeled energy usage is met by renewable energy systems installed prior to completion of the home. The incentive structure within this pathway will include a base incentive plus a performance-based incentive using MMBtu saved as compared to the applicable UDRH as the indicator. Incentives will be paid based upon the ERI before the addition of renewables. An additional fixed incentive for the renewable energy system will be awarded for a project meeting the ZERH+RE eligibility requirements.

ENERGY STAR Multifamily High Rise (MFHR) / ENERGY STAR Multifamily New Construction (MFNC)

On January 1, 2019, EPA launched its new ENERGY STAR MFNC Program that combines low, mid, and high-rise buildings under one program. By July 1, 2021, EPA will cease using its predecessor programs for any multifamily buildings. This pathway will satisfy the requirements for ENERGY STAR MFNC Version 1.1 certification, meeting the performance targets of the ERI or ASHRAE pathways, including full inspection checklist requirements.

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[4] https://www.energy.gov/eere/buildings/guidelines-participating-doe-zero-energy-ready-home-program

Target Market and Eligibility

Newly constructed single-family (i.e., one- and two-family homes), multi-single (i.e., townhouses), multifamily buildings are eligible for RNC Program benefits if the home/building will use natural gas and/or electricity as the heating fuel supplied by a New Jersey public utility. The target market for this RNC Program is homebuilders and raters.

For buildings and projects registered in this RNC Program during FY20 and thereafter, the Decision Tree used in the new ENERGY STAR MFNC Program, which is set forth in this Compliance Filing as Appendix D, will be used to determine which ENERGY STAR Program will apply to the building or project.

The RNC Program will also enroll any existing home/building undergoing substantial renovation or remodeling ("gut") that meets the above criteria.

Projects participating under this RNC Program are not eligible for participation or incentives under any other NJCEP program, including but not limited to the Residential HVAC Program (*COOL*Advantage/*WARM*Advantage) or Existing Homes Program, for any building envelope components, equipment, or appliances that were included as part of application to this RNC Program.

Program Requirements

To qualify for the RNC Program, a home must meet ENERGY STAR Certified Home, ZERH, ZERH+RE, ENERGY STAR MFHR, or ENERGY STAR MFNC requirements.

The technical details presented below address most program requirements. The full technical specifications for RNC Program compliance are available upon request. The ENERGY STAR Certified Homes and ZERH Program requirements (e.g., checklists, standards and modeling inputs) are periodically updated by EPA ENERGY STAR and supersede requirements of this program.

ENERGY STAR Certified Homes

Meet or exceed all EPA ENERGY STAR Certified Homes version 3.1 or 3.0 (based on permit date) Performance Path standards[5] including:

- Meet or exceed the ENERGY STAR Certified Homes version 3.1 or 3.0 Energy Rating Index Target; and
- Complete all ENERGY STAR Certified Homes version 3.1 or 3.0 mandated checklists.

Zero Energy Ready Home (ZERH)

Meet or exceed all DOE ZERH Performance Path technical standards[6] including:

- Complete all ENERGY STAR Certified Homes Version 3.1 Program and all ZERH checklists.

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[5] ENERGY STAR Certified Homes: https://www.energystar.gov/newhomes/homes_prog_reqs/national_page

[6] Zero Energy Home Standards https://www.energy.gov/eere/buildings/zero-energy-ready-home

Zero Energy Ready Home + RE (ZERH + RE)

Meet or exceed all ENERGY STAR and ZERH requirements as described above.

Additional RNC Program Requirements:

- 100% of the building's modeled electric site energy usage must be met by renewable energy systems installed onsite prior to completion of the home.

ENERGY STAR Multifamily High-Rise (MFHR)

Meet or exceed EPA ENERGY STAR MFHR Program standards[7] including:

- Follow Performance Path which utilizes ASHRAE approved energy modeling software to determine energy savings of a customized set of measures; and
- NJCEP will require the application of a specific baseline within six months of EPA imposing such a requirement.

ENERGY STAR Multifamily New Construction (MFNC)

Meet or exceed EPA ENERGY STAR MFNC Version 1.1 performance path standards[8] including:

- Meet or exceed the ENERGY STAR MFNC 1.1 following either the Energy Rating Index or ASHRAE pathways.
- Complete all ENERGY STAR MFNC 1.1 mandated checklists.

Incentives

The RNC Program incentive tables can be found in Appendix A.

The incentives include a base incentive determined by building type, plus a performance-based incentive calculated using the incremental annual MMBtu saved as compared to the calculated annual usage of the baseline, reference home defined by the applicable energy code. For all but MFHR and MFNC utilizing the ASHRAE pathway, the applicable code is IECC. For MFHR and MFNC utilizing the ASHRAE pathway, the applicable code is ASHRAE 90.1. The IECC code reference home is a UDRH utilized in the rating software to compare the rated home to a home of the same dimensions, but with components meeting the applicable IECC code as determined by the date of the project's building permit. The ASHRAE reference building is incorporated in the EPA-approved rating software. The building component values used in the UDRH are included in the NJ Protocols to Measure Resource Savings.

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[7] https://www.energystar.gov/partner_resources/residential_new/program_reqs/mhrp/program

[8] Multifamily New Construction Standards:
https://www.energystar.gov/newhomes/homes_prog_reqs/multifamily_national_page#site-built

Urban Enterprise Zone (UEZ) / Affordable Housing / Low- and Moderate Income Enhanced Incentive

The RNC Program will offer bonus incentives for eligible homes located in UEZs, that are or will be, Affordable Housing, and/or that are or will be, occupied by those of Low- and Moderate Income (LMI).[9]

ZERH Rater Incentive

The RNC Program will offer rater incentives to raters for each single-family or multi-single homes that the rater is successful in obtaining ZERH or ZERH+RE incentives.

Cooperative Marketing

The Cooperative Marketing Incentive offers cost-sharing for pre-approved advertising placed by contractors participating in the HVAC, HPwES, and RNC Programs. The cost sharing is for 25% of the cost of event booth spaces and 50% of the cost of other types of advertising. Those other types of advertising include print (newspaper, magazine, newsletter), yellow pages, direct mail, television, radio, web banner (digital), signage, billboard, and social media. In addition, other types of advertising may be approved on a case-by-case basis if the applicant can demonstrate its relative cost-effectiveness and benefits to NJCEP. The fiscal year cap per contractor is $75,000 for contractors listed as HPwES trade allies and $50,000 for contractors listed as trade allies for other programs. Contractors seeking to utilize the Program should contact coop@NJCleanEnergy.com.

Planned Program Implementation Activities for FY21

The following program implementation activities will be undertaken in FY21. The RNC Program will:

- Implement the changes and updates described above;
- Continue to review applications and, on a first-in-time basis, issue Enrollment Letters that indicate, among other things, the amount of program funds committed to projects whose applications demonstrate their eligibility for the program as long as funding is available;
- Continue to process incentives for completed projects meeting program requirements;
- Utilize the Outreach Team to recruit new builder participants with an emphasis on ZERH projects;
- Actively engage with DOE, raters, and builders to identify challenges of participating in the ZERH pathway; and
- Work with Board Staff and/or the Board's other contractors to identify a more consumer-friendly term for ZERH.

Quality Control Provisions

Market-based delivery of rating services and certifications requires an effective set of standards for quality assurance. The responsibility for builder quality and ENERGY STAR and/or ZERH

[9] LMI is defined in consultation with Board Staff and is set forth in the Program Guide, applications, and/or other Program documents.

Certification rests with raters, ratings providers, DOE, and EPA-approved VOOs, and MROs. It is incumbent upon the program to assure that a robust system for identifying and communicating quality issues exists to manage the credibility of the savings and associated incentives offered.

To maintain a robust rating marketplace, TRC will perform inspections and conduct oversight processes on raters and projects. Quality Assurance activities will continue to be performed by TRC based on the track record of raters and builders measured through program inspections.

In addition to reviews for data completeness on all checklists, forms and applications, on-site inspections, and technical review of building and rater files will be required based upon the demonstrated proficiency of the builders and raters. Inspection requirements will be adjusted based upon the track record of the program participants. Initial inspection rates for new builders and rating companies will be above average and will decrease as they demonstrate proficiency in proper building techniques and in understanding the qualifying requirements of the program.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Energy Efficient Products Program

Program Purpose and Strategy Overview

The Energy Efficient Products ("EEP") Program promotes the sale and purchase of ENERGY STAR certified and other energy efficient products including lighting, appliances, and consumer electronics, while also supporting the "early retirement" and recycling of existing inefficient appliances in New Jersey households. Aligned and complementary to the other NJCEP programs, the EEP Program is focused on the reduction of plug load and lighting energy usage in New Jersey homes. The EEP Program strategy focuses on providing participants with knowledge and motivation to make efficient purchases and offsetting the initial price of higher efficiency products in order to make these purchases affordable.

Providing relevant information to consumers most typically occurs through retail partners. The EEP Program strategically invests in ensuring that participating retailers have the information they need to adequately train their floor staff to speak to the benefits of energy efficient purchase options. These knowledgeable salespeople are who consumers rely on. The EEP Program also provides in-store Point of Purchase ("POP") materials and signage to clearly identify promoted products and steer consumers towards them. The EEP Program seeks to capture the greatest savings possible at the lowest cost, while also ensuring that opportunities are available through a wide range of retail channels. Creative promotions are aimed at historically hard-to-reach customers. The EEP Program is designed to be flexible so that midstream adjustments to the product mix can be made as needed to ensure continued savings, especially with respect to the continued evolution of the lighting market.

Program Description

The EEP Program provides targeted rebates and messaging to consumers, community partners, manufacturers, and retailers for the sale and purchase of selected energy efficient products. Energy efficient lighting and appliances are typically more expensive than less efficient alternatives. This higher cost may discourage consumers from choosing energy efficient products. Rebates under this program are intended to reduce the initial purchase price of energy efficient lighting and appliances making the products more affordable. Messaging raises awareness of efficient options and its benefits.

The EEP Program employs several key approaches to deliver energy savings to New Jersey residents including:

- Educating consumers on the role energy efficiency can play in reducing home energy consumption;
- Supporting the availability of a range of affordably-priced energy efficient product choices for consumers through rebates and midstream/upstream markdowns;
- Offering marketing and training support for retailers, manufacturers, and contractors selling energy efficient products to ensure they can address the benefits of these products with customers;
- Sponsoring event-based initiatives and other innovative approaches to bring energy efficient technologies to hard-to-reach populations that have not historically participated in retail-based program approaches;

- Working with national government agencies, manufacturers, and retailers to help develop and introduce new energy efficiency offerings;
- Supporting and informing consumers regarding product recycling and disposal to address potential environmental impacts;
- Leveraging national energy efficiency programs, promotions, marketing materials, and advertising to support New Jersey initiatives; and
- Coordinating with NJ electric and gas utilities and other entities, such as Sustainable Jersey, to co-brand and leverage customer participation and savings.

In FY21, the EEP Program is adding low-flow showerheads and several weatherization products. It will continue to explore ways to expand the proportion of the program that incorporates the upstream/midstream approach with additions that support specific efficient appliances. The EEP Program will also offer training support to new retailers, manufacturers, and other organizations while continuing to maintain existing partner relationships.

Target Market and Eligibility

The target market for the EEP Program is all New Jersey consumers who purchase lighting, appliances, and other energy consuming devices in retail stores across the state. The appliance recycling component also targets all New Jersey residents who have older working refrigerators, freezers, room air conditioners ("RACs"), and dehumidifiers that typically consume considerably more electricity than comparable newer efficient models.

Offerings and Incentives

The EEP Program offers promotions and incentives in the following product categories:

- Lighting;
- Appliances and Consumer Electronics;
- Appliance Recycling;
- Showerheads; and
- Weatherization Products

Lighting

The lighting component will continue to offer retail price incentives through upstream markdown and creative markdown promotions for qualified lighting products. Lighting products will be limited to ENERGY STAR-certified Light Emitting Diodes ("LEDs"). LEDs have become the dominant efficient lighting option, competing directly with halogens. However, some non-certified LEDs have begun to squeeze ENERGY STAR-certified LEDs off the shelves, which may lead to customers making quick purchasing decisions that favor those lesser quality bulbs over ENERGY STAR-certified LEDs. This could ultimately lead to customer disenchantment with all LEDs. Eligible lighting products will be as set forth in the table below:

Table 1: Eligible LEDs

LED Bulb Tier Effective Date	Bulb Lifetime	Availability in Stores
ES LEDs V2.1 – specification released 12/31/15; eff. 1/1/17	15,000+ hours	Currently in stores

Through an RFP process, incentives are provided for eligible products (up to a negotiated volume) sold by selected New Jersey retailers during promotional periods. Incentives vary by type of product and/or distribution channel based on negotiations with manufacturers and/or retailers. Based on experience with the earlier initiatives and regional promotions, the FY21 maximum incentives will be as shown in the Table in Appendix A: Residential Incentives below.

In addition to the retail markdowns described above, the EEP Program will continue to support Creative Outreach and Education Promotions, the goals of which are to:

- Create awareness through events that attract consumers and provide opportunities to disseminate program information and interact with consumers to answer questions;
- Educate consumers on the benefits of energy efficient lighting and appliances;
- Encourage consumers to move beyond the "first step" of using energy efficient lighting products and to take the next step to adopt more significant energy efficiency measures;
- Create awareness and encourage adoption of no/low cost methods of reducing energy consumption (such as addressing standby loads, the use of advanced power strips etc.); and
- Focus on hard-to-reach residential market channels that have not been well-served through the markdown lighting initiative.

A lighting sub-component provides selected eligible lighting products to food banks, non-profits, and social service agencies serving the economically disadvantaged for distribution to the community they serve at no cost to the organizations or their recipients. An RFP process is used to solicit partners. The foregoing should increase electrical energy savings in this market segment. The cost of the lighting products will be passed through to NJCEP as a rebate, grant, or other direct incentive.

Appliance and Consumer Electronics

The Appliance and Consumer Electronics component will continue to offer downstream rebates on clothes washers, clothes dryers, refrigerators, and certain small appliances purchased by NJ customers. Customers can apply by paper application or through an online application. These incentives will be supported with a variety of promotional approaches, including leveraging the Environmental Protection Agency's ("EPA") national ENERGY STAR campaigns. Incentives for two tiers of performance will be offered for certain items to promote even higher efficiency levels.

The program performance criteria for clothes washers in FY21 will align with the ENERGY STAR v8.0 specification. The higher tier incentive for washers will align with the current ENERGY STAR Most Efficient specification to support increased market share of the highest efficiency models.

For refrigerators, the program performance criteria in FY21 will align with the ENERGY STAR V5.0 specification. Similar to clothes washers, the higher tier incentive for refrigerators will align with the current ENERGY STAR Most Efficient specification to support increased market share of the highest efficiency models.

For clothes dryers, the program performance criteria in FY21 will align with the ENERGY STAR V1.1. The higher tier incentive will align with the criteria for the current ENERGY STAR Most Efficient Product.

For air purifiers, dehumidifiers, and room air conditioners, there will be a single incentive tier based on their current ENERGY STAR specifications.

Through the midstream promotion process, certain retailers are able to provide an "instant" rebate at the register. If the retailer does not participate in the midstream promotion, consumers can submit rebates for clothes washers, refrigerators, and dryers either online via the NJCEP website or by mail.

The EEP Program will continue to provide midstream point-of-sale incentives for advanced power strips in a tiered structure similar to that utilized for appliances. A Tier 1 unit requires manual control and a Tier 2 unit is designated by its ability to provide automatic active power management. These will be offered through participating retailers or through partners in the Creative Markdown Promotions or both.

The appliance and consumer electronics incentive table can be found in Appendix A.

Showerheads and Weatherization Products

In FY21, the EEP Program will offer midstream rebates (retailer markdowns) on showerheads that use ≤ 2 gallons per minute (gpm) and meet the WaterSense v1.1 specification and a variety of weatherization products. The EEP Program will offer retail price incentives through markdown and creative markdown promotions for qualified products. Through an RFP process, incentives are provided for eligible products (up to a negotiated volume) sold by selected New Jersey retailers during promotional periods. Incentives vary by type of product and/or distribution channel based on negotiations with manufacturers and/or retailers. Eligible products and incentive amounts will be as set forth in the applicable tables in Appendix A.

Appliance Recycling

The appliance recycling component offers residential customers the opportunity to recycle their old, inefficient refrigerators and freezers in exchange for a "bounty" incentive payment. Small commercial customers are also eligible if they meet program requirements. Additionally, the program provides the option for customers to receive an additional rebate for recycling room air conditioners and dehumidifiers when a refrigerator or freezer is already being picked up for a household. Customers can call or go online to schedule a pick-up appointment. NJCEP uses a third-party vendor to provide turnkey program implementation. The vendor manages the appointment scheduling, confirms customer and unit eligibility, conducts the pick-ups, transports the units to a recycling facility, and oversees their decommissioning.

The EEP Program will continue to promote and facilitate the early retirement of inefficient, working appliances. Implementation will include:

- In-house appliance pickup and direct access to participants;
- Tracking of individual units and recording of the recovery and destruction of all hazardous materials in compliance with the EPA's Responsible Appliance Disposal ("RAD") guidelines; and
- Evaluating retail partnerships that support removal and recycling of refrigerators and freezers at the time of new product purchase.

The EEP Program will continue to offer a $50 incentive to New Jersey residents and small commercial/businesses for turning in their working old, inefficient primary and secondary refrigerators and freezers for recycling. A $25 incentive will be offered for the recycling of a room air conditioner or dehumidifier. However, the room air conditioners or dehumidifiers would be considered secondary units and recyclable only in conjunction with a larger unit (refrigerator/freezer). The secondary units would be picked up at the same time as the larger unit to be eligible for a rebate.

This component is being expanded to include bulk recycling pick-up from multifamily buildings. Multifamily properties can schedule no-cost pickup and responsible recycling of old, inefficient appliances and receive a rebate payment for each recycled appliance. Eligible equipment includes refrigerators, freezers, room air-conditioners, and dehumidifiers. The ability to pick up a large volume of appliances from a single multifamily building location offers the program cost savings, while expanding program benefits to the multifamily sector. All air-conditioners must be removed from windows or walls and dehumidifiers drained of water.

The EEP Program incentives are shown in Appendix A: Residential Incentives.

General Activities

TRC, in consultation with Board Staff, will maintain the existing retailer base and recruit new retailers as needed. The EEP Program will continue to leverage retailer participation in developing and distributing collateral and "point of purchase" (POP materials for product groups. The program will provide retail associate training in generating consumer awareness at the point of product display. The EEP Program Manager's Retail Outreach Team will also continue to promote the program at NJCEP sponsored events.

National ENERGY STAR Promotions

The EEP Program will participate in applicable and appropriate National ENERGY STAR promotions. For example, because NJCEP offers both a rebate on a new ENERGY STAR refrigerator purchase and the recycling of an older refrigerator, the EEP Program will continue to support the EPA's "Flip Your Fridge" campaign. NJCEP will advertise the campaign on the NJCEP website by leveraging materials developed by the EPA for "Flip Your Fridge" participants.

National Meetings

TRC will attend the National ENERGY STAR Lighting, Appliance and Consumer Electronics Partners Meetings to showcase New Jersey's innovative work on efficient products. There, TRC will also learn new best practices to incorporate with the program and meet with national manufacturers and retailers to discuss New Jersey promotions.

Quality Control Provisions

For promotions featuring customer rebates, such as the appliance rebate and recycling promotions, documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all rebate program participants. All applications received are reviewed and processed for verification of the documentation that the equipment meets program requirements. The information contained in each application is entered into a database that allows checking for duplicate applicants through an equipment serial number comparison.

For promotions that include markdowns taken at the point of sale, such as the lighting promotions, the TRC Retail Outreach Team visits the participating storefronts on a regular basis to verify that program products have been received, have been displayed properly, and are priced according to program requirements. If necessary, they will help unpack the products and put them on display with the required program materials, as well as, train sales staff about program rebates and the energy savings a customer might expect from purchasing a program product. Performance reports, including photos of program products and signage, are provided to the Program Managers to assist in evaluating retailer feedback, developing future promotions, and selecting the most effective proposals.

When invoices are received for marked down products, they are reviewed to ensure that the sales meet all program stipulations. These include verification that the products were sold in a participating location; incentive amounts are correct and for the stipulated products; final retail prices are correct; and total allocation amount has not been exceeded. All of these conditions must be met in order for payment to be processed for each sales period.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Commercial and Industrial Energy Efficiency Programs

General Overview

The NJCEP C&I EE Programs are designed to help New Jersey's businesses use electricity and natural gas more efficiently. Efficiency in electricity and gas usage will promote competition and increase industry success ensuring job retention and creation. There is also an environmental benefit to electricity and gas usage efficiency. Each individual C&I Program is described in more detail in the relevant subsections below.

The C&I Programs are designed to:

- Provide information on how to meet and exceed current energy code requirements so buildings operate more efficiently thereby minimizing operating costs;
- Encourage customers to choose high efficiency options when undertaking construction or equipment upgrades (i.e., when customers normally construct buildings or purchase building systems equipment);
- Support market transformation by providing information and incentives to help customers and designers make energy efficient equipment specification, building/system design**,** lighting design**,** and commissioning part of standard business practices; and
- Stimulate commercial and industrial customer investments in energy efficiency that will support the growth of the industries that provide these products and services.

The C&I Programs address the key market barriers that make it challenging for developers, designers, engineers, and contractors to routinely incorporate energy efficiency in their projects, including:

- Lack of familiarity or uncertainty with energy efficient building technologies and designs;
- Bias toward lower initial cost and lack of procedures for considering lifetime building operating costs during decision-making;
- Compressed time schedules for design and construction;
- Aversion to risk involved with specifying technologies less familiar to the local design community despite the proven reliability of efficient technologies and designs; and
- Priorities for engineers, designers, and contractors that often do not align with incentive structures and energy efficiency considerations.

The C&I Programs employ a comprehensive set of offerings and strategies to address the market barriers noted above and to achieve market transformation in equipment specification, building/system design, and lighting design. These include:

- Program emphasis on intervention during customer initiated construction and equipment replacement events that are a normal part of their business practice;
- Coordinated and consistent outreach to C&I customers, especially large and centralized players, such as national/regional accounts, major developers, etc.;
- Consistent incentive levels for efficient electric and gas equipment and design practices to permanently raise efficiency levels;
- Prescriptive incentives for pre-identified energy efficient equipment and custom incentives for more complex and aggressive measures to permanently raise the efficiency levels of standard equipment;

- Pay for Performance ("P4P") opportunities that emphasize building operation and performance in addition to the efficiency of installed equipment;
- Information and technical support provided to customers and designers to make energy efficient equipment specification, building/system design, lighting design, and commissioning part of standard business practices;
- Information and technical support provided to customers and designers to facilitate compliance with New Jersey's new commercial energy code, as well as, future upgrades to that code; and
- A wide range of programs designed to meet the needs of a diverse set of customers, including non-profit entities, local governments, and businesses of all sizes.

Unless specifically stated in the following program descriptions, customers eligible for incentives under New Jersey's C&I EE Program are defined as non-residential electric and/or gas customers of one of New Jersey's regulated electric or gas utilities who contribute to the Societal Benefits Charge fund ("SBC"). With the exception of the new construction segment, applicants to any of the NJCEP C&I EE Programs must be contributors to the SBC within the previous 12 months.

Construction projects are subject to prevailing wage requirements pursuant to P.L. 2009, c. 203, which amends P.L. 2009, c. 89, as well as, the prevailing wage regulations promulgated by the New Jersey Department of Labor and Workforce Development pursuant to P.L. 1963 c. 150 as amended, and N.J.A.C. 17:27-1.1 et seq. and Affirmative Action rules. The prevailing wage rate shall be paid to workers employed in the performance of any construction undertaken in connection with BPU financial assistance programs. This law applies to contracts greater than the amount set forth by the New Jersey Department of Labor and Workforce Development. Unless otherwise stated, by submitting an application to the program and receiving program incentives, customers self-certify that they are complying with prevailing wage requirements.

C&I Buildings: C&I New Construction and Retrofit Programs

"SmartStart"

Program Purpose and Strategy Overview

The C&I New Construction and Retrofit ("SmartStart") Programs are part of the original suite of C&I programs available through the NJCEP. These programs are offered to eligible customers that contribute to the SBC.

The SmartStart Program's primary goals are to induce C&I customers to choose high efficiency equipment rather than standard efficiency equipment when they are making purchase decisions and to replace aging standard equipment in existing buildings. This is accomplished by providing incentives and information on a wide range of high efficiency alternatives. Prescriptive Incentives— where dollar amounts are fixed for specific categories of equipment— are offered where one-for-one, business as usual replacements are typical. The Prescriptive Incentive applications are labeled by technology, such as lighting and HVAC, and defined as equipment most commonly recommended for energy efficient projects with well-established energy savings. Custom incentives are offered for non-standard equipment, complex systems, and specialized technologies that are not easily addressed through prescriptive offerings. Customers are provided a discrete yet flexible application process with the ability to submit one or multiple applications for any size project. The transparency of incentives aids customers in making informed decisions, while assisting energy efficiency professionals to better solicit a prospective energy efficiency project.

The program adds, removes, or modifies Prescriptive Incentives for various energy efficiency equipment routinely based on national and local market trends, the development of new technologies, and changes in efficiency baselines.

Program Description

The SmartStart Programs offer both prescriptive and custom incentives for the broad range of C&I customers who are in the market to purchase energy efficiency measures. On September 3, 2019, the State of NJ adopted the ASHRAE 90.1-2016 energy code for all commercial and industrial buildings. Beginning in FY21, the NJCEP will utilize this code in determining performance requirements and incentive eligibility.

The SmartStart Programs will include the following offerings:

- **Prescriptive Efficiency Measure Incentives** that provide fixed incentives for energy efficiency measures. Incentives are based on incremental costs (i.e., the additional cost above baseline equipment) taking into consideration market barriers, changes in baselines over time, and market transformation objectives. Eligible measures include:
    - Electric Chillers;
    - Natural Gas Chillers;
    - Unitary HVAC (Heating, Ventilating, Air Conditioning) Systems;
    - Ground Source Heat Pumps ("Geothermal");
    - Gas Fired Boilers;
    - Gas Furnaces;
    - Variable Frequency Drives ("VFDs");

- Gas Fired Water Heating;
- Gas Fired Water Booster Heating;
- Tankless Water Heaters;
- Select Premium Efficiency Motors;
- Prescriptive Lighting & Lighting Controls;
- Performance Based Lighting;
- Kitchen Hood Variable Frequency Drives;
- Low Intensity Infrared Heaters;
- Boiler/AC Economizing Controls;
- Refrigeration Controls;
- Refrigerated Doors/Covers; and
- Food Service Equipment

- **Custom Measure Incentives** for more complex and aggressive efficiency measures. The process for calculating custom measure incentives is performance-based, which may include a commissioning component. Incentives are evaluated and determined via an incremental cost and energy savings analysis to be provided by the customer or customer's authorized representative (vendor/contractor). Determination of the appropriate baseline (existing conditions and/or industry standard) will be reviewed on a case-by-case basis subject to program review and approval. For measures that appear to have no clear baseline per energy code or recognized industry standard, the Program Manager will work with the applicant to define an appropriate baseline. The Program Manager has the discretion to determine the reasonableness of project costs for proposed technologies based on industry standards and other market research. Eligible electric and gas measures include lighting systems, HVAC systems, motor systems, large boiler systems, gas-engine driven chillers, and other non-prescriptive measures proposed by the customer. Technologies not explicitly listed as custom (per the filing and/or Program Guide) will be reviewed for eligibility and are subject to approval at the discretion of the Program Manager. More details regarding this process can be found below in this Compliance Filing under the *Custom Measure Incentive Guidelines* section and in this Compliance Filing's Appendix B found in the *Custom Measures* section.

Customers or their contractors must submit an application for the type of equipment they have chosen to install. The application should be accompanied by a related worksheet (where applicable), a manufacturer's specification sheet for the selected equipment, and one month of the most recent electric/natural gas utility bill. The Program Manager may also require additional utility bills if such bills are relevant to its review of any given application. To qualify for incentives, customers must be contributors to the SBC that corresponds to their incentive (e.g., must contribute to the SBC electric fund if applying for an electric incentive). For example, customers applying for prescriptive lighting incentives must provide an investor-owned utility ("IOU") electric bill identifying SBC contribution. Similarly, an IOU gas bill identifying SBC contribution is required for natural gas saving measures such as gas heating. Program representatives will then review the application package and approve it, reject it, and/or advise of additional upgrades to equipment that will save energy costs.

Target Markets and Eligibility

The C&I New Construction and C&I Retrofit Programs target commercial, educational, governmental/institutional, industrial, and agricultural customers engaged in customer initiated construction events, including public school construction, other new building construction, renovations, remodeling, equipment replacement, and manufacturing process improvements. The program offers incentives and technical support for both existing buildings and new construction. In addition, the program may be used to address economic development opportunities and transmission and distribution system constraints. It is primarily geared towards the mainstream C&I market, as opposed to, programs that target specialized markets such as the Large Energy Users Program, the Local Government Energy Audit Program, and the Direct Install Program. Applicants to the program must be contributors to the SBC.

Incentives

The tables in Appendix B: Commercial and Industrial Incentives (including Enhancements) and General Rule list the incentives for the C&I New Construction and C&I Retrofit program components. The incentives vary by size, technology, and efficiency level and will be paid based on specific eligibility requirements. The program offers both prescriptive incentives and custom measure incentives.

Custom Measure Incentive Guidelines

The program utilizes a performance-based approach to determine incentives for custom equipment. Established incentive caps for the program are the lesser of:

- $0.16/kWh and/or $1.60/therm based on estimated annual savings;
- 50% of total installed project cost; or
- buy down to a one-year payback

The program will allow a single facility with multiple utility accounts to submit a proposed custom project under one application. A customized set of Microsoft Excel-based forms is required for all projects. These forms summarize the critical components of the custom measure, including a detailed description of the technology, installed project cost, and projected savings. Upon project completion, additional documentation is required to confirm that the measures were installed as proposed and that any changes during construction are reflected in the final savings values. As is clearly described in the program forms, certain measures may require post-installation metering, trending analysis, and/or the installing contractor's Statement of Substantial Completion. Baseline for custom retrofit projects are existing conditions; however, the custom measure must meet or exceed ASHRAE 90.1-2016 standards where specific guidelines exist. In cases where ASHRAE guidelines do not apply, the program will require that custom measures meet or exceed industry standards per the Consortium for Energy Efficiency ("CEE"), EPA ENERGY STAR, or using such resources as the current New Jersey baseline studies and other market research; the program experience of the Commercial/Industrial Program Manager; and experience of the New Jersey utilities or utility/public program experience from other comparable jurisdictions. New construction/gut-rehab projects will use ASHRAE 90.1-2016 as the baseline for estimating energy savings and the proposed measure(s) must exceed ASHRAE 90.1-2016 standards or other standards (CEE, EPA, Etc.), where applicable. The Program Manager will provide contractors

with program spreadsheets that include standard formats for reporting program savings as well as standard incentive calculations.

As a general matter, the preference is to avoid repeated custom measure applications. Accordingly, the Program Manager will generally consider the possibility of developing and proposing a prescriptive standard and incentive once it has received three or more custom applications for the same measure.

C&I New Construction and Retrofit Programs Pre-Approval Guidelines

Before commencing installation or construction of equipment that will be the subject of a SmartStart application, applicants for the following types of projects must receive either a notification of a successful pre-inspection or a waiver of pre-inspection from the Program Manager:

- Custom measures;
- Prescriptive Lighting seeking incentives ≥ $100,000;
- Prescriptive Lighting Controls seeking incentives ≥ $100,000; and
- Performance Lighting seeking incentives ≥ $100,000 (existing buildings only).[10]

Further, and for the avoidance of doubt, the above requirement does not apply to any other SmartStart application types. However, to be eligible for incentives related to those other application types, the application must be submitted to the Program Manager within 12 months of equipment purchase. Sufficient documentation must be provided to the Program Manager confirming date of equipment purchase (material invoice, purchase order, etc.).

Notwithstanding the above, all applicants are strongly encouraged to obtain the Program Manager's approval and an incentive commitment prior to commencing installation or construction. Customers implementing projects without the Program Manager's approval risk having their project deemed ineligible for incentives.

Delivery Methods

All of New Jersey's C&I Clean Energy Programs will be managed by TRC. The programs will be offered on a consistent program design and implementation basis to ensure consistency across the state.

As new technologies are introduced and prices for measures change, sometimes in response to program offerings, Program Managers will continuously monitor technologies and costs and adjust program incentives accordingly. The Program Manager will propose adjustments to program offerings based on program experience, the results of any evaluations, program and market studies, as well as, other state/regional market research, and current pilot/demonstration projects.

Quality Control Provisions

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all C&I program participants. All applications received are

[10] The change from the prior requirement that the subject project's receive the Program Manager's approval prior to commencing installation/construction will be applied both prospectively and retroactively.

reviewed to confirm compliance with eligibility requirements. Additionally, all technical information submitted in support of the application is reviewed to confirm measure qualification and to verify the incentive calculation. Applicant-supplied information and Program Manager-performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence.

A sample percentage of applications will be randomly selected for pre-inspection and/or post site inspections and Quality Control file reviews. The specific percentages by program are outlined in the individual program guideline documents. Inspections include a site visit to verify customer eligibility and energy efficient measure technical specifications that result in a verification of the incentive calculation. A field inspection report is prepared and maintained in the project file for future verification.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

C&I Buildings: Pay for Performance – Existing Buildings

Program Purpose and Strategy Overview

The Pay for Performance – Existing Buildings Program ("P4P EB") is intended to encourage contractors and building owners to identify ways to lower their total energy consumption from a whole-building perspective to achieve greater savings than are typically achieved through one-for-one equipment change-outs. Instead of simply providing incentives to replace existing equipment with high efficiency equipment, P4P EB seeks to transform the way contractors and design professionals view energy use. The P4P EB Program achieves this by requiring the use of standardized energy simulation software to estimate initial savings, then encourages building owners and their designated contractors to continue measuring their facility's energy consumption and savings in subsequent years. The P4P EB Program highlights the impact building operation practices have on energy use by paying a portion of the incentive based on a measurement and verification (M&V) component to determine whether estimated savings levels are actually achieved.

Program Description

This market-based program relies on a network of contractors ("Partners"), selected through a Request for Qualifications process. Once approved, Partners may provide technical services to program participants. Although Partners work under contract with building owners, acting as their "energy expert", they are required to strictly follow program requirements. Partners are required to develop an Energy Reduction Plan ("ERP") for each project, including a whole-building technical analysis, a financial plan for funding the energy efficiency improvements, and a construction schedule for installation. The ERP must include a package of energy efficiency measures that achieve the minimum Energy Target of 15%[11] energy reduction of total building source energy consumption based on an approved whole-building energy simulation. The achievement of the Energy Target is verified using post-retrofit billing data and EPA Portfolio Manager methodology.

Additionally, the ERP must include a comprehensive mix of measures and include at least two unique measures (e.g. lighting and HVAC improvements). The rule is no more than 50% of the total source energy savings may be derived from lighting measures. However, lighting measure savings that exceed 50% may still be considered if the Program Manager determines the scope of work is otherwise comprehensive based on the following:

> (a) assesses of the cost-effectiveness of installing energy conservation measures ("ECM") in each of the following areas:
>
> > (i) heating systems;
> >
> > (ii) cooling systems;
> >
> > (iii) ventilation systems;
> >
> > (iv) domestic hot water systems; and

[11] Energy Target is rounded down to two significant figures e.g. 0.1487 is rounded to 0.14 or 14%.

(v) building envelopes

(b) implements all cost-effective ECM identified through the foregoing assessment or, as to any such measures not implemented, explains why such implementation would not be feasible. For example, a scope of work in a high school that does not include replacement of a 30-year-old atmospheric boiler would not be allowed to include lighting savings greater than 50% of the total source energy savings. Recommended measures must meet or exceed ASHRAE 90.1-2016 requirements or program minimum efficiency requirements, whichever is more stringent.

An alternative savings threshold of 4% source energy savings is offered to customers whose annual energy consumption is heavily weighted to manufacturing and process loads. In order to be considered for this alternative savings threshold, the project must involve:

- A manufacturing facility (including such industries as plastics and packaging, chemicals, petrochemicals, metals, paper and pulp, transportation, biotechnology, pharmaceutical, food and beverage, mining and mineral processing, general manufacturing, and equipment manufacturers), data centers, and hospitals;
- Manufacturing and/or process-related loads, including data center consumption, consume 50% or more of total facility energy consumption; or
- For hospitals, 50% or more of the gross floor area must be used for general medical and surgical services and 50% or more of the licensed beds must provide acute care services.

Savings projections will be calculated using calibrated energy simulation. The approach involves the following steps:

1. Develop whole building energy simulation using approved simulation tools. The list of approved tools will be based on the software requirements outlined in ASHRAE 90.1 Section 11 or Appendix G or as approved by the Program Manager;
2. Calibrate simulation to match pre-retrofit utility bills;
3. Model proposed improvements to obtain projected energy savings; and
4. Calculate percent energy reduction to demonstrate achievement of Energy Target.

Modeling methodology is in general compliance with national programs such as LEED and EPAct Federal Tax Deductions for Commercial Buildings.

Pre-approval of the ERP, which may include a site inspection, is required for all projects. An ERP must be approved by the Program Manager and an approval letter sent to the participant and Partner in order for incentives to be committed. Upon receipt of an ERP, all project facilities must be pre-inspected. Measures installed prior to pre-inspection of the facility shall not be included as part of the ERP scope of work and will not be eligible for incentives. Measure installation undertaken prior to ERP approval, but after pre-inspection, is done at the customer's own risk. If an ERP is rejected by the Program Manager, the customer will not receive any incentives.

Projects that cannot identify efficiency improvements that meet the above requirements may be referred to another appropriate C&I Buildings Program(s).

Target Market and Eligibility

The P4P EB program is open to existing C&I buildings with peak demand of 200 kW or greater in any of the preceding twelve (12) months. This participation threshold is 100 kW for eligible multifamily facilities. The Program Manager has the discretion to approve projects that are within 10% of the minimum 200 kW threshold (100 kW for multifamily facilities). Additionally, any multifamily facility that does not meet the eligibility requirements of the Home Performance with ENERGY STAR Program is eligible to participate in the P4P EB Program. Due to the comprehensive design of this program, projects may not apply for incentives in other NJCEP programs while enrolled in the P4P EB Program for the same facility(ies). All eligible measures must be considered in P4P EB, with the exception of on-site generation (e.g. CHP program). Additional exceptions may be considered by the Program Manager on a case-by-case basis.

The P4P EB Program defines a project as a single, detached commercial, industrial, or multifamily building. The entire building must be analyzed under the program and meet program requirements. Exceptions apply as follows:

Campuses/Multiple Buildings: A campus-style facility is one where ALL the following conditions apply:

- There are two or more P4P-eligible buildings that are located on adjacent properties;
- Buildings are owned by a single entity; and
- One of the following:
    - Buildings are master-metered;
    - Buildings are served by a common heating and/or cooling plant; OR
    - Buildings share walls and/or are connected via a physical structure.

In this instance, the entire campus is treated as a single project under the program. The 200 kW participation threshold will be met through an aggregation of all buildings. The Energy Target (along with all other program requirements) will be achieved in aggregate, as well. Only one set of incentives will be paid per project and all incentive caps apply.

Multifamily Buildings: The P4P EB Program will continue to accommodate certain types of multifamily buildings. Specifically, multifamily customers that fit the following description will be able to participate in the present program:

- ***High-rise/Mid-rise buildings***
    - High-rise/Mid-rise apartment complexes are apartments, cooperative, and/or condominiums structures that are four stories or more above ground.

- ***Low-rise, garden-style buildings with central heating and/or cooling or master meters***
    - Garden-style apartment complexes consisting of multiple low-rise apartments, cooperatives, condominiums and/or townhouses that are three stories or less, surrounded by landscaped grounds;
    - Central heating and/or cooling means that each individual unit does not contain its own heating or cooling systems. The building must contain a central heating and/or cooling plant that serves multiple buildings and/or units; and

- Master meters means electric and/or gas meters that serve multiple buildings (rather than individual units or a single building).

Low-rise (and mid-rise, where appropriate) garden-style complexes will be treated as one project under the P4P EB Program. In other words, if there are ten garden-style buildings that are part of one multi-family community, all ten will be aggregated into one P4P EB Program application. The 100 kW participation threshold will be met through this aggregation (including common area and in-unit billing). The Energy Target and all other program requirements will be achieved in aggregate, as well. Only one set of incentives will be paid per project and all incentive caps apply. Exceptions to this rule may be considered by the Program Manager on a case-by-case basis where financial constraints prevent the entire complex from participating at once or where parts of the complex are determined to be better suited for Home Performance with ENERGY STAR.

Please see the logic tree in Appendix D: Multifamily Decision Tree for guidance on multifamily program eligibility.

Partner Network

The P4P EB Program has developed a network of Partners who can provide the technical, financial, and construction related services necessary for participation in this program. One of the goals of this program is to expand the network of energy efficiency firms that can provide these services to make this program accessible for all eligible C&I customers. This market based approach is a key component of market transformation by creating "green collar" jobs and helping to develop the workforce necessary to achieve ambitious long term energy savings targets. New partnership applications are accepted on a rolling basis, subject to review and approval by the Program Manager and completion of a program orientation and training webinar. Certain entities who have their own in-house professional engineering expertise can become a Partner for their own facility(ies)[12]. The Program Manager also holds monthly Partner conference calls to present program updates, technical topics, and discuss any issues that Partners may be encountering. Approved Partners may need to complete online re-training in order to remain an approved Partner in the program. The Program Manager may offer select Partners one-on-one training on projects to ensure success in the program, as well as, kick-off meetings upon project enrollment.

Program Offerings and Incentives

The P4P EB Program's incentive structure was conceived to encourage the design and achievement of comprehensive energy savings. Therefore, these incentives are released in phases upon satisfactory completion of each of the following three program milestones:

1. Submittal and approval of a complete ERP;
2. Installation of all recommended measures per the ERP; and
3. Completion of Post Construction Benchmarking Report demonstrating achieved energy savings.

[12] This option is geared toward larger customers. This opportunity will be evaluated on a case-by-case basis by the Program Manager. All other Program requirements will be in effect.

At the customer's written request, incentive payments may be assigned or directed (including re-assignment or re-direction) to either the customer, the Partner, or other designated representative.

Certain enhanced incentives are available, as more fully described below in this section.

Incentive #1 – Energy Reduction Plan (ERP)– This incentive has been developed to offset the cost of services associated with the development of the ERP and is based on the square footage of the building(s) paid at $0.15/sq. ft. with a maximum incentive of $50,000 and minimum of $7,500. This incentive is capped at 50% of annual energy cost, which assists in limiting incentives for facilities with large square footage but very low energy intensity (e.g. warehouses).

It should be noted that customers who have successfully participated in the Local Government Energy Audit ("LGEA") Program, Incentive #1 related to the ERP above will be reduced by 50%, with a maximum incentive of $25,000 and minimum of $3,750in order to recognize the value of the audit provided through the LGEA Program. This reduction only applies if the date of the audit report is less than 3 years from the date of receipt of the P4P EB initial application.

Incentive #1 is contingent upon moving forward with the installation of measures identified in the ERP and must be supported by a signed Installation Agreement. The Program Manager, in coordination with the Division of Clean Energy, may waive this requirement due to extenuating circumstances. If a project is cancelled after the receipt of Incentive #1 and the Incentive #1 payment is not returned to NJCEP, the customer/Partner will not be eligible in the future for another Incentive #1 payment for the same facility.

Paid Incentive #1 may be up to 5% higher than committed to account for fluctuations in square footage identified between initial application and ERP submittal.

Incentive #2 – Installation of Recommended Measures – This incentive is based on the projected energy savings as estimated in the approved ERP. The performance based incentives to be paid at completion of construction are as follows:

- Projected first year electric savings from $0.09/kWh for the minimum 15% (or 4% when applicable) savings up to $0.11/kWh based on $0.005/kWh per additional 1% savings.
- Projected first year natural gas savings from $0.90/therm for the minimum 15% savings (or 4% when applicable) up to $1.25/therm based on $0.05/therm per additional 1% savings.

In certain circumstances, the committed incentive may be adjusted due to changes between the scope of work approved in the ERP and what was actually installed. Significant changes to measures, including removal or addition of a measure, will require a revision to the ERP subject to re-evaluation and adjustment of Incentives #2 and #3. Additionally, if the total incentive is capped at project cost, an increase in cost will not result in an increased incentive. However, a decrease in cost will result in a decreased incentive. Generally, adjustments that increase the incentive are subject to budget availability. Minor modifications to the approved scope of work will not require ERP revisions. It is assumed these fluctuations will be captured in Incentive #3.

Incentive #3 – Post Construction Benchmarking Report – This incentive is based on the actual energy savings demonstrated in the twelve (12) months following installation of recommended measures. Savings are measured at the whole building level using a weather-normalized utility bill analysis. The performance based incentives are as follows:

- Actual first year electric savings from $0.09/kWh for the minimum 15% savings (or 4% when applicable) up to $0.11/kWh based on $0.005/kWh per additional 1% savings.
- Actual first year natural gas savings from $0.90/therm for the minimum 15% savings (or 4% when applicable) up to $1.25/therm based on $0.05/therm per additional 1 % savings.
- If savings are below the 15% minimum, but at or above 5%, the project will still be eligible for an incentive although at a reduced rate calculated at $0.005/kWh less and $0.05/therm less from the base incentive (i.e. $0.09/kWh and $0.90/therm) for each 1% savings below 15%. So long as the savings are at or above 5%, the minimum incentive paid is $10,000 or committed value, whichever is less, assuming all required data and documentation is submitted. If savings are less than 5%, there would be no Incentive #3 savings.

Incentives #2 and #3 are intended to act as a single performance incentive that is paid in two installments to provide upfront financial assistance in implementing the project. The Post Construction Benchmarking Report's main purpose is to "true-up" this performance incentive in the post-retrofit period by adjusting Incentive #3 so the total performance incentive (i.e. Incentive #2 and #3) is in compliance with the program's incentive structure. Therefore, true-up of Incentive #3 includes any under or overpayment of Incentive #2 based on actual savings.

The Post Construction Benchmarking Report must demonstrate savings over at least one year of post-construction energy consumption. The Program Manager may grant up to an additional twelve (12) month extension for extenuating circumstances where projected savings levels were not reached based on the initial one-year post-construction consumption.

Incentives #2 and #3 combined will be capped not to exceed 50% of the total project cost. The total of Incentives #1, #2, and #3 combined shall not exceed $2,000,000 per project, assuming both electric and natural gas measures are recommended and implemented. Should only electric measures or only gas measures be recommended and implemented, then the total of Incentive #1, #2, and #3 combined shall not exceed $1,000,000 per project. For the avoidance of doubt, the foregoing would place a $1,000,000 per project cap on electric-only facilities. Entity caps also apply.

Enhanced Incentives

Applicants will be eligible for an enhanced incentive equal to an additional 100% of the Incentive #2 and #3 values set forth above in this section for a project installed at a UEZ/AH/Public building as defined in this Compliance Filing. Further, the foregoing eligibility for an enhanced incentive will also apply to any Multifamily Affordable Housing. Lastly, applicants will also be subject to a project cost cap of 80% rather than the usual 50%.

Quality Control Provisions

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all P4P EB Program projects. All applications received are reviewed to confirm compliance with eligibility requirements. Applicant eligibility information is verified along with all technical information in support of measure qualification and incentive calculation. Applicant supplied information and project technical data are entered into the database. Electronic files are created for all documents and for ongoing project correspondence. The Program Manager reviews submitted Energy Reduction Plans.

The Program Administrator quality control staff will perform pre- and post-construction inspections, will regularly conduct pre-approval technical reviews of the ERPs, and will perform file reviews on a sampling of applications prior to issuing incentive payments. The selection of inspections and reviews will be based on a pre-determined, random sampling percentage.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

C&I Buildings: Pay for Performance New Construction

Program Purpose and Strategy Overview

The Pay for Performance – New Construction Program ("P4P NC") is intended to encourage developers and design professionals to look for ways to optimize design, operation, and maintenance of new construction and substantial renovation projects in order maximize energy cost savings. The P4P NC Program does this by requiring the use of standardized energy simulation software to estimate energy costs of the proposed design compared to a code compliant baseline. As with P4P EB, a portion of project incentives is tied to actual building performance to emphasize to building owners the critical value of addressing operational practices. The P4P NC Program aligns with other rating authorities such as LEED, ENERGY STAR, and ASHRAE Building Energy Quotient.

Program Description

The P4P NC Program takes a comprehensive, whole building approach to energy efficiency in the design and operation of new commercial and industrial buildings, as well as, in major renovations. The program provides tiered incentive levels correlated to the modeled energy cost savings as demonstrated in the proposed design and includes a performance component to reflect the value that effective building operation has in determining energy use. This market based program relies on a network of Partners selected through a Request for Qualifications process. Once approved, Partners may provide technical services to program participants. Although Partners work under contract with building owners, acting as their "energy expert", they are required to strictly follow program requirements. Partners will be required to develop a Proposed ERP for each project. The Proposed ERP details a set of recommended measures that will achieve the minimum performance target. Partners will then provide an As-Built ERP, along with a Commissioning Report to demonstrate that recommended measures are installed and functioning. Lastly, the Partner will benchmark the building following one year of operation to document how well the building is operating relative to the As-Built ERP.

Participants will be required to work with an approved Partner to develop the Proposed ERP and facilitate the incorporation of the recommended energy efficiency measures. The submitted Proposed ERP must include a package of energy efficiency measures that achieve the minimum performance target of 5% savings for commercial and industrial buildings and 15% for multifamily buildings compared to ASHRAE 90.1-2016[13]. The minimum performance target will be measured in terms of energy cost, which is consistent with ASHRAE 90.1, Appendix G, EPAct Federal Tax Deductions and LEED NC. Program Guidelines will outline equivalent savings values depending on the modeling compliance path chosen.

Partners are required to develop whole building energy simulations using approved simulation tools. The list of approved tools will be based on the software requirements outlined in ASHRAE 90.1 Section 11 or Appendix G or as approved by the Program Manager. The program will offer

[13] Energy Target is rounded down to two significant figures e.g. 0.0487 is rounded to 0.04 or 4%.

Note also that applications for projects that submit documentation they received their construction/building permits under ASHRAE 90.1-2013 will have their P4P NC applications processed using ASHRAE 90.1-2013 as their baseline.

two modeling compliance paths to demonstrate that the proposed design meets or exceeds the minimum performance target.

Path 1: ASHRAE Building Energy Quotient (bEQ) As-Designed Path

Under this path, the Partner will develop a single energy model representing the proposed project design using prescribed modeling assumptions that follow *ASHRAE Building Energy Quotient ("bEQ") As-Designed* [14] simulation requirements. Proposed design simulation results, including Energy Use Intensity ("$EUI_{standard}$"), will be measured against the median EUI for the building type ("EUI_{median}") to evaluate the Performance Score.

$$\text{Performance Score} = (EUI_{standard} / EUI_{median}) \times 100.$$

Measures must be modeled within the same proposed design energy model, but as parametric runs or alternatives downgraded to code compliant parameters.

Path 2: ASHRAE 90.1-2016 Appendix G Path

Under this path, the Partner will model a baseline and proposed building using ASHRAE 90.1-2016 Appendix G *modified by Addendum BM.* Addendum BM sets a common baseline building approach that will remain the same for ASHRAE 90.1-2016 and all future iterations of ASHRAE 90.1, and is roughly equivalent to ASHRAE 90.1-2004. To comply with ASHRAE 90.1-2016, a proposed building has to have energy cost savings of 11-40% from the Addendum BM baseline, depending on the building type and climate zone. Measures must be modeled as interactive improvements to the ASHRAE 90.1-2016 Appendix G baseline with Addendum BM accepted.

Each project, regardless of compliance path selected, must have at least one measure addressing *each* of the following building systems: envelope, heating, cooling, and lighting (e.g. increased insulation, improved HVAC efficiency, lighting power density below code requirements, etc.). Buildings that are not heated (e.g. refrigerated warehouse) or not cooled (e.g. warehouse) will not be required to have a measure addressing the missing building system. Measures are defined as components that exceed ASHRAE 90.1-2016 requirements.

Core and Shell vs. Tenant Fit-Out Considerations

Generally, P4P NC projects are required to evaluate the whole building design. Further, if a P4P NC application is submitted to the Program, that same building(s) cannot also submit applications to other programs. An exception to this rule may apply to eligible projects pursuing Core & Shell separate from tenant fit-out improvements, which may fall into one of two scenarios below.

Scenario 1: Core & Shell and Tenant Fit-out are combined - In this scenario, all aspects of the design (whole building) must be included under a single P4P NC application and treated as a single project following all Program Guidelines, as typical. This may apply where:

- Developer is funding and constructing both Core & Shell and Tenant Fit-out; or

[14] http://buildingenergyquotient.org/asdesigned.html

- High performance systems are specified and funded for the tenant space separate from Core & Shell, but the building owner and tenant come to an agreement to include both scopes of work under a single project.

Scenario 2: Core & Shell Separate from Tenant Fit-out - This scenario applies when the Core & Shell work is known, but the tenant space development is unknown and/or is funded separately. In this case, the Core & Shell is treated as a separate project from the Tenant Fit-out and a building may apply for P4P NC for either Core & Shell or Tenant Fit-out(s), but not both. The determining factor depends on which scope will include design and construction of the central HVAC system, in which case:

- P4P NC incentives will apply to all conditioned square footage of the building serviced by the central HVAC in the project's scope of work;
- The project scope applying for P4P NC (e.g. Core & Shell or Tenant Fit-out) must be able to meet all requirements for P4P NC on its own.
- Any Tenant Fit-out or Core & Shell work not included in P4P NC, (and connected to a non-residential electric/gas account paying into the SBC), may seek incentives through the C&I Prescriptive or Custom Measure programs for eligible equipment.

A project may apply to the program at any point during the design phase. Projects that have begun construction may still apply so long as measures have not been purchased prior to receipt of the program application. Any measures installed prior to approval of Proposed ERP are done so at the project's risk. In the event the equipment selected does not qualify for an incentive, it will be removed from the Proposed ERP. Projects that cannot identify efficiency improvements that meet the above requirements will be referred to the appropriate C&I Buildings Program(s).

See Program Guidelines at www.njcleanenergy.com for additional modeling considerations.

Target Market and Eligibility

The P4P NC Program is open to new C&I construction projects with 50,000 square feet or more of conditioned space. The Program Manager has the discretion to approve projects that are within 10% of the minimum 50,000 square foot threshold. Projects may include a single building meeting square footage requirements or multiple buildings provided those buildings are owned by the same entity, are located on adjacent properties, and are designed and constructed within the same time period.[15] Multiple buildings that are grouped into one program application are viewed as a single project that is eligible for one set of program incentives and all incentive caps apply to the group of buildings.

Due to the comprehensive design of this program, projects may not apply for incentives in other NJCEP programs while enrolled in P4P NC for the same facility(ies). All eligible measures must be considered in P4P NC, with the exception of on-site generation (e.g. CHP program). Exceptions

[15] For the purpose of tracking technical reviews and site inspections each building addressed within a multi-building ERP may be considered a separate project. This is necessary because although a single ERP will include all of the necessary project information, the review of each of the building simulation models will require individual attention. Similarly, site inspections will take considerably longer for multi-building projects as each building will require an inspection. Where applicable, administrative tracking will be associated with any approved sampling of building simulation models (i.e., if a single model is developed to represent several similar buildings).

also apply to Core & Shell and/or Tenant Fit-out projects as set out in the foregoing paragraphs. Additional exceptions may be considered by the Program Manager on a case-by-case basis.

Multifamily Buildings

The P4P NC Program accommodates certain types of multifamily buildings. Please see the decision tree Appendix D: Multifamily Decision Tree for guidance on multifamily program eligibility.

Low-rise (and mid-rise where appropriate), garden-style complexes will be treated as one project under the Pay for Performance program. In other words, if there are 10 garden-style buildings that are part of one multifamily community, all 10 will be aggregated into one P4P NC application. The 50,000-square-foot participation threshold will be met through this aggregation (including common area and in-unit). The minimum performance target (as well as all other program requirements) will also be determined on an aggregated basis. Only one set of incentives will be paid per project and all incentive caps apply.

Partner Network

Existing approved P4P NC Partners will need to complete online re-training on a regular basis as determined by the Program Manager in order to remain an approved Partner in the program. The Program Manager may offer select Partners one-on-one training on projects to ensure success in the program, as well as, kick-off meetings upon project enrollment. Depending on program demand, the Program Manager may provide subsidized Energy Modeling Training Sessions for Program Partners related to ASHRAE 90.1-2016. (See also the P4P EB section of this Compliance Filing.)

Program Offerings and Incentives

The P4P NC Program's incentive structure was conceived to encourage the design and achievement of comprehensive energy cost savings and are, therefore, released in phases upon satisfactory completion of each of these three program milestones:

1. Submittal and approval of a Proposed ERP with proposed design meeting all program requirements;
2. Submittal and approval of an As-Built ERP and Commissioning Report confirming installation and operation of recommended measures per the Proposed ERP. Changes between proposed and as-built design must be accounted for at this point, although as-built project must still meet all program requirements; and
3. Submittal of ENERGY STAR Portfolio Manager benchmark based on first year of operation with score of 75 or higher. Building types not eligible for ENERGY STAR Certification can qualify for this incentive by obtaining *ASHRAE Building Energy Quotient (bEQ) In-Operation* Certification with equivalent score as set by Program Guidelines. Additional certification for compliance may be considered by Program Manager.

Incentives are paid based on the rate schedule in the table below. At the customer's written request, incentive payments may be assigned or directed (including re-assignment or re-direction) to either the customer, the Partner, or other designated representative.

Table 2: P4P NC Incentive Schedule

	Cost or Source Energy Reduction from 90.1-2016 Baseline	Incentive by Building Type Per Square Foot	
Minimum Performance Requirement	15% Multifamily 5% All other	Industrial/High Energy Use Intensity	Commercial and Multifamily
Incentive #1 Proposed Energy Reduction Plan	+ 0 - <2% (Tier 1)	$0.10	$0.08
	+ 2 - <5% (Tier 2)	$0.12	$0.10
	+ 5% or greater (Tier 3)	$0.14	$0.12
	Max	$50,000.00	
	Pre-Design Bonus	$0.04	
	Max	$20,000.00	
Incentive #2 As-Built Energy Reduction Plan and Cx Report	+ 0 - <2% (Tier 1)	$1.00	$0.80
	+ 2 - <5% (Tier 2)	$1.20	$1.00
	+ 5% or greater (Tier 3)	$1.40	$1.20
Incentive #3 Building Performance		$0.40	$0.35

- Incentive #1 is contingent on moving forward with construction and must be supported by required program documentation (e.g. signed Installation Agreement). The Program Manager, in coordination with the Division of Clean Energy, may waive this contingency in extreme situations where construction is halted due to economic or other external factors. If a project is cancelled after the receipt of Incentive #1, the incentive amount shall be returned to NJCEP. If the Incentive #1 payment is not returned to NJCEP, the customer/Partner will not be eligible in the future for another Incentive #1 payment for the same facility.
- The total of Incentives #1, #2, and #3 combined shall not exceed $2,000,000 per project, assuming both electric and natural gas measures are recommended and implemented. Should only electric measures or only gas measures be recommended and implemented, then the total of Incentive #1, #2, and #3 combined shall not exceed $1,000,000 per project. For the avoidance of doubt, the foregoing would place a $1,000,000 per project cap on electric-only facilities. Entity caps also apply.
- Certain circumstances may impact an incentive amount after a commitment has been made:
    - Increase or decrease in project square feet may increase (budget permitting) or decrease the incentive;
    - Significant modifications to the approved scope of work, including addition and removal of a measure, may impact the overall project savings causing a project to

move between incentive tiers. Incentives will be adjusted up (budget permitting) or down accordingly; and

- Generally, any required adjustments will also include under or overpayment of incentives already paid.

Incentive #1 Pre-Design Bonus (Integrative Process): Projects that are in pre-design or schematic design may be eligible for a higher Incentive #1. The goal is to incentivize applicants to think critically about their building design from an energy efficiency standpoint early in the process when changes are easier to make, thereby supporting high-performance, cost-effective project outcomes. To qualify, the Partner will need to work with the applicant beginning in pre-design and continuing throughout the design phases. They will perform a preliminary "simple box" energy modeling analysis before the completion of schematic design that explores how to reduce energy loads in the building and accomplish related sustainability goals by questioning default assumptions. They will then document how this analysis informed building design decisions relative to owner's project requirements, basis of design, and eventual design of the project. This submittal shall be submitted after application approval but prior to the Proposed ERP. Although pre-construction inspections are not routinely performed in this program, TRC may inspect projects applying for this bonus.

Quality Control Provisions

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all P4P NC Program projects. All applications received are reviewed to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of measure qualification and incentive calculation. Applicant supplied information and project technical data are entered into the database. Electronic files are created for all documents and for ongoing project correspondence. The Program Manager reviews submitted ERPs.

The Program Administrator quality control staff will perform pre- and post-construction inspections, will regularly conduct pre-approval technical reviews of ERPs, and will perform file reviews on a sampling of applications prior to incentive payments. The selection of inspections and reviews will be based on a pre-determined, random sampling percentage.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

C&I Buildings: Large Energy Users Program

Program Purpose and Strategy Overview

The purpose of the Large Energy Users Program ("LEUP") is to foster self-investment in energy efficiency and combined heat and power projects for New Jersey's largest C&I utility customers. This program was established in 2011 as a pilot following requests from these customers to develop a program specific to their needs and in recognition of their large contribution to the SBC. These large, sophisticated facilities have unique needs and internal processes which may not align with the structure of other C&I programs with respect to submission criteria or timing. The LEUP offers a more flexible process to these customers, many of whom have engineers on staff, but in turn requires that participating facilities comply with accountability processes to obtain incentives, thus assuring that the desired efficiency is achieved. The program supports various types of large customers spanning the pharmaceutical, higher education, industrial, building management, data center and other commercial sectors.

Specific design features include:

- Ability to submit multiple projects/buildings under one application;
- Flexible application submission process providing the customer the opportunity to submit up to 3 scopes of work in each program year;
- Appealing incentive structure allowing customers to obtain up to 90% of their respective NJCEP contribution for qualifying projects; and
- Ability to participate in other programs while engaged in LEUP.

Program Description

Incentives are awarded to customers that satisfy the program's eligibility and program requirements ("Eligible Entities or Eligible Customers") for investing in self-directed energy projects that are customized to meet the requirements of the customers' existing facilities, while advancing the State's energy efficiency, conservation, and greenhouse gas reduction goals. The program relies on eligible customers and their technical consultants to identify and develop qualifying energy efficiency projects that they believe will be beneficial for their operations and will meet program criteria as described below. In support of LEUP projects, the Program Manager will provide the following services:

- Budget management and energy savings reporting;
- Review and approval/rejection of all submitted enrollment submittals for program eligibility;
- Review and approval/rejection of all submitted Draft Energy Efficiency Plan ("DEEP") submittals; [16]
- Review and approval/rejection of all submitted Final Energy Efficiency Plan ("FEEP") submittals;
- Technical assistance via email and telephone to assist entities in the proper submittal of the required information;
- Updates of data tracking tools to incorporate additional tasks related to this initiative; and

[16] Note: the approved entity may choose to skip the DEEP submittal and to submit only a FEEP.

- Incentive processing including issuance of checks and tracking/recordkeeping.

Eligible customers who wish to participate in the LEUP must comply with the standards and criteria below.

Target Markets and Eligibility

The LEUP is available on a first come, first served basis so long as funding is available to existing, large C&I buildings that meet the following qualifications:

- Eligible entities must have incurred at least $5,000,000 in annual energy costs (on a pre-sales tax, aggregate of all buildings/sites) during the immediately preceding fiscal year. Eligible entities shall be defined as (1) Public: having distinct and separate budgetary authority; (2) Public Schools: having distinct and separate budgetary authority; and (3) Private: Non-residential companies including all related subsidiaries and affiliates regardless of separate EIN numbers or locations within New Jersey. Consistent with Docket No. EOO7030203.
- Further, in order to be considered for incentives, the average billed peak demand of all facilities included in the DEEP/FEEP must meet or exceed 400kW and/or 4,000 DTherms.
    - Example: Entity submits DEEP/FEEP for two buildings. Building one has a metered peak demand of 200kW; building two has a metered peak demand of 600kW. Per the above guideline, both buildings would be considered for incentives as the average would be equal to 400kW.

Entities interested in applying to participate in the program will submit the following information through form(s) available through the NJCEP website and/or Program Manager:

- Number of buildings/sites and list of all associated utility and third-party supplier accounts;
- Total usage and number of location or premise IDs as provided by utility; and
- Total contribution to NJCEP fund in previous fiscal year from above buildings/sites.

Submittal Requirements for Fund Commitment

Qualifying entities shall submit a FEEP to the Program Manager for existing facilities only. The FEEP must be submitted to the Program Manager for review three (3) months from the date of the DEEP approval letter.

Program Standards

1. All ECM must meet Minimum Performance Standards, which may be fulfilled during professional engineer review, which shall be understood as the most stringent of:
    a. Pay for Performance Guidelines-Appendix B;
    b. ASHRAE 90.1-2016; and
    c. Local code
2. ECMs must be fully installed no later than twelve (12) months from approval of the FEEP. Extensions may be granted for a period of up to six (6) months with satisfactory proof of project advancement. This could be in the form of copies of permits, equipment invoices, installation invoices indicating percentage complete, updated project schedules, etc.

Limitations/Restrictions

1. New construction and major rehabilitation projects are not eligible under the program; however, these projects may be eligible for other NJCEP incentives.
2. Incentive will be limited to energy efficiency measures. The following shall not be included as part of this program:
    a. Renewable energy; and
    b. Maintenance energy saving projects
3. Incentives shall only be available for ECMs approved in the FEEP. The Program Administrator may waive this restriction on a case-by-case basis using the Board's usual waiver standard.
4. ECMs already installed or under construction will not be considered for incentives and shall not be included in FEEP. The Program Administrator may waive this restriction on a case-by-case basis using the Board's usual waiver standard.
5. Federal grants/incentives are allowed. Other state/utility incentives are allowed provided they do not originate from NJCEP funds. NJCEP loan funds are allowed. Total of federal, state, utility, and LEUP funding shall not exceed 100% of total project cost.
6. No DEEP or FEEP may have more than 50% of the overall total energy savings coming from lighting and/or lighting controls measures.

Review and Payment Framework

1. Upon receipt of the FEEP, Program Manager will have sixty (60) days to review each submittal and provide comments to entity.
2. Program Administrator will present FEEPs to Board for approval as required by Board policy and commitment of incentive. The Program Administrator may conduct up to three site inspections per FEEP submission including a pre-inspection at 50% completion and 100% completion, as required.
3. If ECMs are not completed within the specified timeframe, incentive commitment may be forfeited.
4. Entity will provide M&V data as requested and will comply with any program evaluation activities.

Program Offerings and Incentives

The program will offer a maximum incentive per entity, which will be the lesser of:

- $4 million;
- 75% of total project(s) cost as identified in the FEEP. Total project costs may include pre-engineering costs, soft costs, and other costs associated with the preparation of the FEEP;
- 90% of total NJCEP fund contribution in previous year (i.e. from all entity facilities), provided, however, that an applicant may choose to bank and combine up to two (2) consecutive years of total NJCEP fund contributions for the purpose of calculating its maximum incentive in a given fiscal year, provided the applicant has not participated in LEUP in the fiscal year immediately preceding the subject application. By way of example, if a participant in FY15 contributed $500,000, in FY16 contributed $600,000, and in FY16 did not submit a LEUP application, the applicant's maximum incentive for a project in FY17 would be no more than $990,000 (.9 x (500,000 + 600,000)).

    - The total contribution is calculated as 3% of the annual energy costs described in the Target Markets and Eligibility subsection above.
- $0.33 per projected kWh saved annually; $3.75 per projected therms saved annually.

The program has a minimum incentive commitment of $100,000. Projects with incentives below this threshold will be redirected to other NJCEP programs. Incentives shall be reserved upon approval of the DEEP. Program funds will be committed upon approval of FEEP by the Program Manager and, if required, by BPU. Incentive shall be paid upon project completion and verification that all program requirements are met. Entities may submit up to three (3) DEEP/FEEPs throughout the program year.

Quality Control Provisions

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all program participants. All energy efficiency plans are reviewed upon receipt to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and Program Administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. Pre- and/or post- inspections and quality control file reviews will be conducted, as required.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

C&I Buildings: Customer Tailored Energy Efficiency

Program Purpose and Strategy Overview

The Customer Tailored Energy Efficiency Pilot Program ("CTEEPP" or "Pilot") supplements the current New Jersey C&I incentive programs by offering a streamlined approach to developing and implementing energy efficiency projects for mid-to-large customers. The key features of the program:

- Allows customers to bundle multiple prescriptive and custom measures into one application with one project delivery approach;
- Customers can receive incentives for qualified advanced and emerging energy efficiency technologies that are not currently addressed under SmartStart;
- Technical assistance incentives offered to help minimize the soft costs associated with developing an energy efficiency project;
- Leverages existing energy efficiency professional networks;
- Larger customers with multiple measures can access incentives for their targeted energy efficiency projects without enrolling in a whole-building program; and
- Performance verification to engage customers after their project is complete to ensure persistence of savings.

The goals of the CTEEPP are to:

- increase participation among mid to large customers;
- increase the amount of energy saved per project for participating customers;
- understand from participating customers whether assistance beyond measure incentives will facilitate the installation of energy efficiency projects;
- promote the installation of advanced lighting controls in conjunction with high efficiency LED luminaires; and
- collect information and data that can inform program changes or new program designs in the future.

Program Implementation Description

The CTEEPP was developed and launched in FY18 in response to customer concerns regarding the application process for projects involving completion and submission of multiple SmartStart applications. It will be promoted through traditional methods, the C&I Outreach Account Managers, and energy efficiency professionals.

The program process is as follows:

1. **Outreach and Recruitment** – The CTEEPP will be included in any C&I customer outreach conducted by the Account Managers. Information about the Pilot will be placed on the web site and shared with the Ombudsman's office and trade allies who can assist in promoting the pilot to their customers.

2. **Enrollment** - The enrollment application will allow the Program Management team to assess the opportunities, the status of the potential project, and to schedule a Scoping Session meeting where the Case Manager performs a needs assessment to determine

whether the customer requires additional assistance such as referral to technical expertise, financial assistance, internal sales, or benchmarking.

3. **Benchmarking (Optional)** – The Pilot will offer benchmarking services to help customers identify which opportunities and facilities may benefit most from energy improvements.

4. **Energy Efficiency Plan Development** - Upon application acceptance, the customer works with its technical experts to develop the EEP.

5. **Incentive Commitment** - Upon acceptance of a complete EEP, TRC will commit incentives as defined by the EEP and program requirements. The incentive commitment will be valid for twelve (12) months. The Program Manager may extend the initial expiration period in two, six (6) month intervals.

6. **ECM Installation** – The customer will submit final documents necessary to process the incentive payment consistent with the schedule defined below.

7. **Performance Verification** – The performance verification submission applies to custom measures only. A customer will receive the final 10% of custom measure incentives consistent with the schedule defined below.

Target Markets and Eligibility

The target customer sizes for C&I existing buildings and new construction/substantial renovation are as follows:

Table 3: Target Customer Size

Target Customer Size	
Existing Buildings	**New Construction & Substantial Renovation**
200 kW	50,000 square feet

Additional criteria that will be considered for inclusion:

- Customers with complex operations and/or unique energy usage profiles who would most benefit from custom assessments of efficiency opportunities;
- Customers whose efficiency opportunities, barriers to investment, and/or business needs suggest they may benefit from support beyond just financial incentives (e.g. technical analysis, financial analysis, etc.);
- Customers with projects requiring multiple applications under existing program offerings; and
- Customers who are good candidates for installation of new, innovative, or advanced efficiency technologies.

Program Offering and Incentives

Financial incentives offered to customers of the Pilot will be the same as those available through the existing prescriptive and custom program offerings. However, for ease of customer participation, the financial incentives will be bundled into a single "package" application. The total incentive available for any project will be equal to the sum of the incentives available through the existing prescriptive and custom program offerings for the measures installed. For ECMs possessing both prescriptive and custom features, the Program Manager will have discretion to determine if some or all of the energy efficiency benefits will be eligible under the custom incentive structure.

- **Prescriptive Measures:**
  - Measures meeting the requirements of the current SmartStart Building Program will receive the established incentive (including any applicable enhancements) under that program.

- **Custom Incentives:**
  - $0.16 per kWh
  - $1.60 per therm
  - 50% of project cost
  - Buy-down to 1-year payback
  - Same enhanced incentives as for the current SmartStart Building Program

- **Technical Assistance:**
  In addition to measure incentives, where initial design costs are a barrier to the pursuit of projects that appear to be promising, the Pilot may offer customers an additional incentive towards design assistance or technical support provided by an independent[17] third party design professional. Incentives will be available for up to 50% of the cost of the design/technical assistance up to a maximum of $10,000 upon approval of the NJCEP Program Manager, with half of the incentive payable upon proof of construction kick-off and the remainder upon installation of the recommended measures.

- **Incentive cap:**
  The same caps in SmartStart Program apply here, including the $500,000 per utility account cap; however, the Technical Assistance incentive does not count towards this incentive cap.

Payment Schedule

Incentive payments are made along the life of a project as outlined below.

Project material/labor invoices will signify projected completion followed by a post-inspection as deemed appropriate.

[17] Independent in this case means the design professional does not sell or represent products that are being considered for installation.

Table 4: CTEEPP Schedule of Payments

Schedule of Payments			
Type of Incentive	**Milestone 1 Construction Kick-Off**	**Milestone 2 Substantial Completion**	**Milestone 3 Performance Verification**
Technical Assistance Incentive	50%	50%	-
Base Incentives – Prescriptive	-	100%	-
Base Incentives – Custom	-	90%	10%

Milestone 1: The EEP is approved and construction contracts are in place.
Milestone 2: All work is installed and new equipment and systems are generating energy savings. Multiple payments may be provided.
Milestone 3: Performance Verification is complete. Multiple payments may be provided. This milestone may occur between 3-6 months after substantial completion.

Program Standards

- **Prescriptive measures** must meet the minimum requirements of the SmartStart Buildings program.
- **Custom measures** must meet or exceed current SmartStart Custom requirements (with the exception of minimum energy savings requirements) or the Minimum Performance Standards for the LEUP.
- **Advanced Lighting Control Systems** must be listed on the Design Lights Consortium's Qualified Products List.
- **Emerging Technologies** must meet current building codes or industry standards, as applicable.

Limitations/Restrictions

- Renewable and power storage technologies including, but not limited to, photovoltaics, fuel cells, battery storage, and microturbines are not eligible.
- Combined heat and power systems are incentivized under New Jersey's Combined Heat and Power program and are not eligible for CTEEPP incentives.
- Previously installed measures (i.e., any measures installed prior to enrollment) are not eligible. Equipment being replaced must still be present at time of the facility walkthrough where pre-existing conditions are documented. Customers may begin work at their own risk prior to the Notice to Proceed if the old equipment is still in place at the time of the Scoping Session.
- Measures that do not save energy (kWh or therms) are not eligible. Customers may install measures that exclusively reduce operating costs and/or energy/demand costs, but they may not be included in the CTEEPP EEP.

- Operations & Maintenance and behavioral measures are not eligible. Behavioral measures include those where existing equipment is adjusted to improve performance or change energy use. Behavioral measures may include boiler clean & tunes, commissioning of existing equipment, thermostat adjustment, or seasonal equipment removal.

Quality Control Provisions

All applications are reviewed upon receipt to verify adherence to eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and program administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. Inspection protocols for custom measure projects will require a pre-determined percentage of pre- and post-inspections. Pre-inspections may be waived after successful completion of a Scoping Session.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Local Government Energy Audit Program

Program Purpose and Strategy Overview

The Local Government Energy Audit Program ("LGEA") Program was launched as part of NJCEP's portfolio in 2008 to provide financial incentives to cover the cost of having an energy audit performed on eligible facilities owned by municipalities, school districts, 501(c)(3) nonprofits, and other local and state government entities ("Applicants").

The goal of the energy audit is to provide Applicants with information on how their facilities use energy, identify ECMs that can reduce energy use, and put Applicants in a position to implement the ECMs. The energy audits also guide Applicants towards appropriate NJCEP funded incentive programs to help reduce costs associated with implementing the ECMs.

The program is also used as a means of qualifying applicants for other relevant initiatives, most notably the Energy Savings Improvement Program ("ESIP") and Sustainable Jersey's municipal and school programs. Collaboration with these programs can provide cost-effective benefits to these publicly funded facilities while helping to achieve mutual goals.

Program Description

This program is implemented as follows:

- The Applicant will submit a pre-application to the program identifying basic facility information such as, building type, square footage, and recently implemented ECMs, as well as, the reason(s) for requesting an energy audit;
- A case manager will assist the Applicant in determining the audit path that best addresses the Applicant's needs (as described below) before the Applicant submits additional information regarding utility accounts and associated bills and other applicable energy usage information for each building in the scope;
- Available energy audit paths include:
    - ASHRAE Level I audit[18];

[18] From the ASHRAE Handbook:

Level I – Walk-through Assessment – Assess a building's energy cost and efficiency by analyzing energy bills and conducting a brief survey of the building. A Level I energy analysis will identify and provide a savings and cost analysis of low-cost/no-cost measures. It will also provide a listing of potential capital improvements that merit further consideration, along with an initial judgment of potential costs and savings.

Level II – Energy Survey and Analysis – This includes a more detailed building survey and energy analysis. A breakdown of energy use within the building is provided. A Level II energy analysis identifies and provides the savings and cost analysis of all practical measures that meet the owner's constraints and economic criteria, along with a discussion of any effect on operation and maintenance procedures. It also provides a listing of potential capital-intensive improvements that require more thorough data collections and analysis, along with an initial judgment of potential costs and savings. This level of analysis will be adequate for most buildings and measures.

Level III – Detailed Analysis of Capital-Intensive Modifications – This level of analysis focuses on potential capital-intensive projects identified during Level II and involves more detailed field data gathering and engineering analysis.

    - ASHRAE Level II audit; and
    - Add-on scope audits (i.e., a more detailed review of an existing or potential CHP or renewable energy system added on to the scope of a standard audit).[19]
- When an Applicant is enrolled in LGEA and participating in any NJCEP equipment incentive programs at the same time for the same facility(ies), the Program Manager will assess the impact the work may have on the energy audit and require the Applicant take one of the following actions within a determined timeframe, depending on the level of impact:
    - Proceed with energy audit and equipment upgrades (minimal impact);
    - Complete equipment upgrades prior to proceeding with energy audit process or vice versa (moderate impact); or
    - Cancel energy audit application (significant impact).
- If the initial program eligibility and application requirements have been met and the Applicant is approved to have an energy audit performed under this program, the Program Manager will issue an Approval Letter/Notice to Proceed to the Applicant.
- The scopes of work of the energy audit paths are consistent with Section 3.8.1 of RFP 16-X-23938, dated April 21, 2015, and the related Technical Proposal and Contract (#A40225).
- In order to provide compatibility with the ESIP, the energy audit scope will include an evaluation of energy related water conservation measures, demand response potential, and estimated greenhouse gas reduction for each recommended measure.
- After verifying all program requirements have been met, the Program Manager will perform the audit, prepare an audit report, and notify the Applicant when the audit report is completed. Additionally, the Program Manager may meet in person or conduct a web/phone conference with the Applicant to discuss audit findings and next steps for implementing measures recommended in the report.

The LGEA will provide audits up to a value of $100,000 per fiscal year, per Applicant. For larger Applicants interested in pursuing ESIP (by selecting intent to pursue ESIP on the application), if the audit cost exceeds or is expected to exceed $100,000, the Program Manager will work with the Board Staff to determine and authorize a larger cost cap, not to exceed $300,000. Additionally, for non-profit 501(c)(3) healthcare entities, the Program Manager will work with Board Staff to determine and authorize a larger cost cap, not to exceed $300,000, so long as the funds exceeding the initial $100,000 would be for auditing facilities designated as hospitals by the NJ Department of Health ("DOH").

Services offered under LGEA do not count towards the fiscal year incentive cap (see C&I / DER Entity Incentive Caps in Appendix B of this Compliance Filing).

It provides detailed project cost and savings information with a high level of confidence sufficient for major capital investment decisions.

[19] For the avoidance of doubt, the add-on scope audits must be added on to a standard eligible audit and cannot be a standalone study.

Target Markets and Eligibility

LGEA is open to the following eligible entities that contribute to the SBC through either their gas and/or electric utilities:

- "State contracting agency" as defined by N.J.S.A. 52:34-25;
- "Public agency" as defined by N.J.S.A. 52:35A-1;
- Local governments per Local Public Contracts Law (N.J.S.A. 40A:11-1);
- Local governments per Public School Contracts Law (N.J.S.A. 18A:18A-1);
- County colleges per County College Contracts Law (N.J.S.A. 18A:64A-25.1);
- NJ State Colleges or State Universities per State College Contracts Law (N.J.S.A. 18A:64-52); and
- Non-profit charitable organizations per Section 501(c)(3) of the Internal Revenue Code

Applicants may apply for an energy audit for buildings they own. A building may still be eligible if the Applicant leases the building and provides supporting documentation from the building owner authorizing the energy audit before it is performed.

Buildings must demonstrate an average demand of 200kW or greater in the most recent twelve (12) months of electric utility bills (inclusive of all accounts in the building) in order to qualify to participate in LGEA. Buildings that do not meet this requirement will be recommended to apply for the Direct Install Program. The Program Manager will have the ability to grant exceptions to the kW requirement, on a per building basis, if the Applicant can demonstrate they meet at least one of the following criteria:

1. ESIP is an anticipated source of funding;
2. Master or campus metering arrangement on-site where demand of any single building is unknown; and
3. Demonstrates:
    a. The scope of one or more measures the Applicant would like to pursue is not available in the Direct Install Program; or
    b. The type of building is not a good fit for the Direct Install Program (e.g., it is an industrial building).

For #2 and #3 above, the Applicant must provide a detailed explanation as to how it meets the criteria for the claimed exception. LGEA is available to buildings never previously audited under the Program, as well as, buildings that have received an audit no less than three (3) years earlier (measured from the audit report approval date). All program requirements must be met in order for an entity to qualify for a second energy audit.

Quality Control Provisions

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all LGEA participants. All applications received are reviewed to confirm compliance with eligibility requirements and technical information. Applicant supplied information is entered into the database and electronic files are created for all documents, including project correspondence. The Program Manager will perform internal quality assurance reviews on audit reports.

On an annual basis program quality control staff will accompany each LGEA auditor on a visit to a randomly selected LGEA applicant's facility to verify that the audit is conducted in accordance with proper protocols, and to ensure the accuracy of the audit in documenting the facility's detailed building survey. Quality control staff will also regularly conduct technical reviews of full audit reports. The selection of projects will be based on a pre-determined, random sampling percentage. Finally, audit pricing will be reviewed by the Program Manager for consistency and compared to LGEA historical data, referencing similar facilities for comparison.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Direct Install Program

Program Purpose and Strategy Overview

The Direct Install Program was established in 2009 to address the unique barriers experienced by the small business sector that resulted in a historical reluctance or inability to pursue energy efficiency improvements, even when they would yield significant economic benefits. Small businesses in New Jersey frequently lack the ability to acquire funding for capital improvements and almost universally lack the in-house expertise to identify economically advantageous energy efficiency projects in which to invest. Moreover, and perhaps more importantly, small business owners often lack the time to prioritized projects that have been identified even when funding is available.

The Direct Install Program is a turnkey offering that provides small business customers with a single source for financial incentives, information, and technical assistance. Designed specifically with these customers in mind, the Program works through a set of approved contractors who are empowered to promote, enroll, audit, and then install energy efficient measures. The use of fully trained and qualified contractors to provide customers with energy efficiency assessments, effective measure recommendations and installation, and access to incentives that cover up to 70% (with certain cases up to 80%) of the total project costs creates a powerful engine to transform this sector of the C&I market that has historically been unable to participate in the NJCEP Programs at desired levels.

In additional to small businesses, local government entities, non-profit organizations, certain multi-family buildings that meet the eligibility criteria described below, and certain religious facilities may be eligible to participate in the Program in certain cases.

Program Description

The Direct Install Program offers eligible small business customers the opportunity to replace existing inefficient equipment with more energy efficient systems. Municipal and other local government agencies that have successfully participated in the LGEA Program are also eligible. The Program provides turnkey services including technical assistance, financial incentives, and education to encourage the early replacement of existing equipment with new high efficiency alternatives. A variety of electric and natural gas energy-using systems are eligible for improvements including lighting and lighting controls, refrigeration, HVAC and HVAC controls, variable speed drives, and water conservation measures. The Program strives to include a comprehensive package of cost-effective energy efficiency improvements in each customer's project.

Target Market and Eligibility

The Direct Install Program is open to all eligible commercial and industrial customers who contribute to the SBC fund whose average demand, averaged over the preceding twelve (12)

months, is less than or equal to (≤) 200 kW.[20] This small business sector targeted by the Program tends to have a historical reluctance or inability to fund energy efficiency improvements. Additionally, their small size tends to exclude them as beneficiaries of services from other energy service providers. Religious facilities[21] which are metered residentially will be permitted to participate in the Direct Install Program. Applicants will be required to meet all other program requirements.

Program Offerings and Incentives

The Direct Install Program provides turn-key services by offering customers a consistent source of technical assistance, installation services, and financial incentives. The Program will be delivered across the State by the Program Manager in association with multiple regional contractors who will be selected via a Request for Proposal ("RFP") process to deliver installation and related services. Contractors will work in conjunction with material suppliers who will be selected under a separate competitive RFP process.

All contracts with material supplies and contractors will be negotiated to establish consistent, statewide pricing. All equipment proposed must be cost effective per the program rules. Depending on the project, certain equipment may not be considered cost effective. Eligible equipment categories include but may not be limited to:

- Energy efficiency T8 & T5 lamps, ballast and fixtures
- ENERGY STAR approved LED lamps
- Design Lights Consortium (DLC) Qualified LED Fixtures
- HVAC & HW controls
- LED Exit Signs
- Occupancy Sensors
- VFDs
- ENERGY STAR Programmable Thermostats
- ENERGY STAR/High Efficiency Boilers (up to 1,500,000 Btuh)[22]
- ENERGY STAR Furnaces (up to 140,000 Btuh)[23]
- High Efficiency Cooling Systems
- ENERGY STAR Products
- Refrigeration Measures

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[20] Note that a potential participant with multiple facilities sharing a common gas utility account would be eligible so long as the average kW demand of the facilities sharing that account ≤ 200kW.

[21] Refers to buildings that are used as places of worship. This includes churches, temples, mosques, synagogues, meetinghouses, or any other buildings that primarily function as a place of religious worship. It also refers to non-residential buildings that are associated with religious organizations, such as religious schools and religious community centers, but not convents or rectories.

[22] In cases where the existing boiler is oversized, the existing larger boiler may be evaluated and considered for replacement as long as the replacement unit does not exceed 1,500,000 Btuh.

[23] In cases where the existing furnace is oversized, the existing larger furnace may be evaluated and considered for replacement as long as the replacement unit does not exceed 140,000 Btuh.

- Other measures may be added after evaluation by the Program Manager such as retro-commissioning measures, which may include rooftop HVAC tune-ups, refrigerant charges, filter replacements, controls adjustment, and optimization.

In K-12 public and private schools where the facility has an existing boiler that does not exceed 3,000 kBtuh in output heating capacity, the contractor will have the ability to propose a new system that comprises multiple modular boilers in series as an appropriate replacement based on the total output heating capacity and efficiency of the existing boiler. A minimum efficiency level of 93% will be enforced.

Contractors will be solely responsible for boiler project design, providing proper training to the applicant, and developing and providing load calculations to the applicant and the Program Manager. Further, the contractor will be required to work with township code enforcement officials to ensure the installation meets all current local and state codes and standards.

Customer incentives are offered to reduce the cost of installing energy efficient equipment and are based on the total installed cost of the retrofits. The incentives are as follows:

Table 5: DI Incentives

	Eligible to Participate	Eligible to Participate & Project is an ESIP	Eligible to Participate & in a UEZ or OZ[24]	Eligible to Participate & a K-12 Public School or County/Municipal Entity
% of the Installed Cost of Cost-Effective, Approved Measures	70%	70%	80%	80%
Project Incentive Cap	$125,000	$125,000	$250,000	$250,000
Program FY Entity Cap	$250,000	$500,000	$4,000,000	$4,000,000

Incentives are paid to the installation contractor and the contractor will invoice the customer for the remaining balance of the installation.

[24] As defined in Appendix B: Commercial and Industrial Incentives (including Enhancements) and General Rules below.

Open Program for Contractor Participation

If an Applicant wishes to use their own contractor instead of the pre-selected regional contractor for their area, the Program Manager will work with the Applicant's contractor to confirm that the contractor:

1. Meets all of the Program's bid requirements;
2. Agrees to the Program's set pricing;
3. Participates in program training provided by the Program Manager; and
4. Signs the Direct Install Program Participation Agreement.

If all requirements are met, the contractor will be allowed to participate in the Program. If the Applicant's contractor is unable to meet these requirements, the applicant may elect to either proceed in the Direct Install Program utilizing an approved contractor for that specified geographic area or continue with their contractor outside of the Program with the option to access other available NJCEP programs.

Program Financing

Some, but not all, of the local utilities have provided 0% interest, on-bill repayment for Direct Install projects in their service territories. This offer has been extremely effective in making it easier for businesses to participate. The Program Manager will continue to work with the BPU to explore the potential to expand the availability of financing for Direct Install projects statewide either through on-bill repayment or other financing options.

Direct Install Team Responsibilities

The Program Manager will be responsible for the following program components:

- Review and approval of all project Scopes of Work before installation to confirm program eligibility and cost effectiveness; and
- Final review and approval of all projects that have been completed through the execution of the Program's Measure Acceptance Form for incentive finalization.

Direct Install Participating Vendors will be responsible for the following program components:

- Providing offered program equipment required for installation statewide for all approved Direct Install projects;
- Ensuring all provided equipment meets or exceeds the Program's minimum efficiency requirements and guidelines;
- Packaging and shipping of all procured program equipment to the specific project site or contractor; and
- Providing all manufacturer's specifications/certifications and equipment warranties for all installed program equipment to the installation contractor.

Direct Install participating contractors are responsible for the following program components:

- Completing Direct Install Program training provided by the Program Manager;
- Program marketing within their assigned program territories;

- Educating the applicant on the Direct Install Program, completing the Program application, gathering utility information, and pre-qualifying an Applicant;
- Performing site visits and collecting existing equipment inventory and energy usage data, analyzing information and identifying opportunities for efficiency improvements, and making preliminary recommendations;
- Submitting completed energy assessments using the Program's Energy Assessment Tool ("EAT"), to the Program Manager for review and approval;
- Presenting finalized comprehensive recommendations to the customer, including costs and savings estimates, obtaining customer agreement to proceed with installation, and the collection of the balance of projects costs owed by the program applicant (≥ 30% of the total project cost). The customer agreement will be a standard agreement approved by the Program;
- Submission of completed and executed scope of work including pre-implementation report to the Program Manager for review and approval. All measures identified in the Direct Install scope of work are subject to the Program's Total Resource Cost ("TRC") test, which is used to screen out measures that are not cost-effective[25];
- Procurement of all approved program equipment from the Program's selected equipment vendor for lighting and refrigeration. Contractor is responsible for providing all HVAC and mechanical equipment associated with the Program. Contractor is also responsible for procurement of all ancillary equipment required for complete installation;
- Installation of eligible measures per the scope of work, including obtaining all appropriate permits;
- Submission of post-implementation report, including payment request. The Program Manager will review all post-implementation reports and either forward the incentive (≤ 70%) as approved for payment or send back to the contractor with questions or issues for resolution;
- Providing program applicant with all installed equipment technical manuals, manufacturer's specification/certification sheets, and warranties for all equipment and labor;
- Providing a one (1) year warranty on all labor and equipment;
- Tracking and reporting on program activity as requested by the Program Manager, including but not limited to:
    - Inventory of equipment replaced, including quantity, type, location, and hours of use;
    - Estimates of energy (kWh &/or therms) and demand (kW) savings and total project costs;
    - Installation schedules; and
    - Coordinating the proper disposal of all removed equipment.

[25] Note that a participant would be given the option of retaining measures that fail the TRC test by the participant agreeing to bear sufficiently more of the cost of the measure to bring the Program's share of the cost to within the required TRC score. For example, a participant would have the option of increasing its share of the cost of a new furnace to 37%, instead of the usual 30%, if that increased share would increase project's TRC score to the required level.

Delivery Methods

The Direct Install Program will be managed by the Program Manager and will be delivered by a competitively selected pool of contractors and equipment suppliers. The Program will be available to eligible C&I customers statewide. (Note: As indicated in the *General Overview* section for the C&I Energy Efficiency Programs in this Compliance Filing, existing facilities must be contributors to the SBC to be eligible.)

For material pricing, the Program Manager reserves the right to renegotiate and/or rebid pricing annually. For installation pricing, the Program Manger will provide a two (2) year contract with an optional one (1) year extension, and reserves the right to renegotiate pricing at these trigger points or rebid for these services.

Contractors will be informed when program changes are anticipated based on changes in market conditions and/or the strategic direction of the Program. Adjustments will be made as needed during the term of their contract.

The Program Team will, as applicable, exercise its contractual rights, its common law rights, and the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Quality Control Provisions

Documented policies and procedures provide proper guidelines to ensure consistency in the processing and quality control for all Direct Install Program participants. All applications received are reviewed to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and Program Manager performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence. A sample of applications will be selected for quality control file review and site inspections.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Distributed Energy Resources

Overview

NJCEP promotes several categories of Distributed Energy Resources ("DER") to assist in increasing market activities that will increase overall combined electricity delivery system efficiency, reduce overall system peak demand, further the use of emerging and renewable technologies, reduce emissions, and provide cost-effective reliability solutions for New Jersey while supporting the State's EMP.

Combined Heat and Power - Fuel Cell

Program Purpose, Strategy, and Description

This NJCEP Combined Heat and Power – Fuel Cell ("CHP-FC") Program offers incentives for Combined Heat and Power and Fuel Cell projects.

For the purposes of this program, Combined Heat and Power is defined as follows:

- Combined heat and power ("CHP"), also known as cogeneration, is the production of electricity and useful thermal energy from a single source fuel. Useful thermal energy means energy in the form of direct heat, steam, hot water, or other thermal form that is used for heating, cooling, humidity control, process use, or other valid thermal end-use energy requirements, and for which fuel or electricity would otherwise be consumed. Bio-power and partial bio-power projects that meet these criteria are considered to be CHP projects for Program purposes.

Waste Heat to Power ("WHP") projects that comply with the following definition are treated as CHP projects by the Program:

- Waste heat to power is the process of capturing waste heat discharged as a byproduct of an industrial process and using that heat to generate power. In this configuration, a source fuel is first used to provide thermal energy to meet load requirements of a process or system (i.e. not deliberately creating excess thermal energy for the purpose of electricity generation). The byproduct of this process is heat that would otherwise be wasted to the atmosphere. The waste heat is then repurposed to produce electricity, as opposed to, directly consuming additional fuel for this purpose.

Projects meeting the definitions of either CHP or WHP above are collectively referred to as CHP projects in the remainder of this Compliance Filing.

For the purposes of this Program, fuel cells are not considered to be WHP or CHP.

For the purposes of this Program, fuel cell ("FC") is defined as follows:

- Power plants that produce electricity through an electrochemical reaction with a fuel source.

FCs are further broken down between "≥ 60% FCs" that can achieve an annual system efficiency of ≥ 60% (Higher Heating Value – HHV), based on total energy input and total utilized energy output (Efficiency) and "≥ 40% FCs" that can achieve an Efficiency ≥ 40% < 60%.

CHPs and FCs are all eligible for incentives through this program as set forth in more detail below.

Target Market and Eligibility

This CHP-FC Program is open to all New Jersey C&I utility customers paying into the SBC. Applications are reviewed and funds are committed on a first come, first serve basis provided all program requirements are met. CHP-FC systems that receive funding from the Energy Resiliency Bank will not be eligible for incentives through NJCEP.

Equipment Eligibility

Natural gas, hydrogen, biogas, and mixed fuel (e.g. natural gas and biogas) CHP-FC equipment, as well as, FC equipment using any fuel that is installed on the customer side of the utility meter is eligible for incentives. One hundred percent renewable fueled projects, including biogas and landfill gas-fueled projects that meet CHP-FC Program criteria, are also eligible to receive incentives.

To qualify for incentives, CHP and FC projects must meet all the following eligibility criteria:

- Equipment must be new, commercially available, and permanently installed. Expansion of an existing system with new equipment is also eligible. However, only the incremental expansion would be eligible for incentives;
- Systems must operate a minimum of 5,000 full load equivalent hours per year (i.e. run at least 5,000 hours per year at full rated KW output). Board Staff may grant exceptions to the minimum operating hours requirement for Critical Facilities (as identified in the CHP Incentives section of this Compliance Filing), provided the proposed system operates a minimum of 3,500 full load equivalent hours per year and has islanding capability;
- All projects are subject to ten (10) year warranty requirements with the exception of public entities. Public entities that are prohibited from entering into agreements for the full ten (10) years may comply with the 10-year requirement by: (a) providing an agreement for the longest lawful term; (b) committing the entity to purchase an agreement for the remaining years; and (c) either (i) providing the vendor's commitment for specific pricing for those remaining years, or (ii) assuming the pricing for the remaining years will increase by 2.5% each year (e.g., for the purpose of calculating a payback period);
- Each project must pass a project-level cost-effectiveness analysis demonstrating the simple project payback period, including any federal tax benefits and the Program incentive. Systems installed in Critical Facilities must not exceed a payback period of twenty (20) years, systems fueled by a Class 1 renewable source must not exceed a payback period of twenty-five (25) years, and all other systems must not exceed a payback period of ten (10) years;
- All project submissions must contain specific cost data for providing the unit with blackstart/islanding capability regardless of whether the project will have that capability;
- System must be sized to meet all or a portion of the customer's on-site load not to exceed 100% of the most recent historical annual consumption or peak demand. For all projects, any surplus power that may become available during the course of a given year may be

sold to PJM. Any system fueled by a Class 1 renewable source is exempted from this program requirement provided the system is sized to match the Class 1 renewable fuel produced on-site; and

- Installations of multiple systems planned for the same site within a twelve (12) month period must be combined into a single project.

To qualify for incentives, CHP projects must also meet all the following eligibility criteria:

- The CHP system must achieve an annual system efficiency of at least 60% (Higher Heating Value – HHV) based on total energy input and total utilized energy output. Mechanical energy may be included in the efficiency evaluation; and
- Waste heat utilization systems or other mechanical recovery systems are required for CHP projects. New electric generation equipment which captures waste heat or energy from existing systems is also allowed.

To qualify for incentives, FC projects must also meet the following eligibility criteria:

- FC systems must achieve an annual electric system efficiency of at least 40% (HHV) based on Net Useful Electric Power plus Net Useful Thermal Production (if any) divided by the Total Fuel Input at HHV.

Third party ownership (or leased equipment), such as procured under Power Purchase Agreements, is permitted within the program with the following provisions:

- In order to ensure the equipment remains on site and operational for the term of the agreement, a binding agreement is required between the parties. A copy of this agreement shall be provided to the Program Manager prior to commitment of incentives. The agreement should state that the equipment could be transferred to new owners should the property be sold or otherwise have a buyout provision such that the equipment remains on site and stays in operation. Only permanently installed equipment is eligible for incentives and must be physically demonstrable upon inspection prior to receiving an incentive. This can be demonstrated by electrical, thermal, and fuel connections in accordance with industry practices for permanently installed equipment and be secured to a permanent surface (e.g. foundation). Any indication of portability, including but not limited to, temporary structures, quick disconnects, unsecured equipment, wheels, carrying handles, dolly, trailer, or platform will deem the system ineligible;
- The customer/applicant will be allowed to sign over the incentive to the third-party owner. A valid project cost shall be demonstrated as part of the application in order to establish an appropriate incentive level; and
- All other program rules apply.

Not Eligible for CHP-FC Incentives

The following types of generating systems/equipment are not eligible for this CHP-FC Program:

- Used, refurbished, temporary, pilot, demonstration or portable equipment/systems;
- Back-Up Generators (systems intended for emergency or back-up generation purposes); and
- Any system/equipment that uses diesel fuel, other types of oil, or coal for continuous operation.

Manufacturer Diversity Caps for ≥ 40% FCs

During FY21, that is, from October 1, 2020 through June 30, 2021, new incentive commitments for ≥ 40% FCs are capped at $4,500,000, and new incentive commitments for projects primarily involving equipment from any single ≥ 40% FC manufacturer are capped at $1,500,000. By way of example, if during FY21 applicants A, B, and C have each been issued a $500,000 commitment for ≥ 40% FC projects using equipment primarily supplied by manufacturer D, no further commitments would be issued during FY21 for ≥ 40% FC projects using manufacturer D's equipment.

Board Staff may approve exceptions to the above caps on a case-by-case basis if it determines that doing so is necessary to ensure full use of the current FY's FC and/or CHP-FC budgets.

Incentives

Incentives vary based on CHP-FC technology, fuel source, type, the presence or absence of heat recovery, project size, and total project cost. Details on qualifying technologies and available incentives can be found in Appendix C.

Applicants will not be allowed to receive incentives for the installed generation equipment from other available SBC-funded programs or from the Energy Resilience Bank. CHP-FC projects will be evaluated on a per site basis and incentives awarded accordingly. Installations of multiple systems planned for the same site within a 12-month period must be combined into a single project. For the avoidance of doubt, if at any time prior to system installation and operation a project is cancelled or abandoned, the incentive funds paid to date must be promptly returned to NJCEP.

Quality Control Provisions

Quality control provisions are designed to ensure that systems that receive incentives are operating as expected and providing the desired benefits to the State. All applications received are reviewed to confirm compliance with eligibility requirements. Applicant eligibility information is verified, along with all technical information in support of energy efficient measure qualification and incentive calculation. Applicant supplied information and Program Administrator performed incentive calculations are entered into the database, and files are created for all documents and ongoing project correspondence.

TRC will utilize the Contractor Remediation Procedures as necessary or appropriate to address significant performance or other problems.

Renewable Energy

Solar Renewable Energy Certificate Registration Program

Program Purpose and Strategy Overview

New Jersey's solar policies and Renewable Portfolio Standards ("RPS") were established through legislation and implemented through regulation and Board Order. NJCEP's Solar Renewable Energy Certificate ("SREC") Registration Program ("SRP") is designed to meet the goals and objectives of the regulations. Additionally, in FY20 the Board proposed additional regulations establishing a solar Transition Incentive program ("TIP").

Program Description

SRECs are tradeable certificates that represent the clean energy benefits of electricity generated from a solar electric system. Transition Renewable Energy Certificates ("TREC") are certificates that can be sold to the TREC Administrator at fixed prices determined by the Board. For each 1,000 kWh (1MWh) of electricity a solar electric system generates, an SREC or TREC is issued, which can then be sold or traded separately from the power. The revenues from SREC or TREC sales or trades can make it more economically attractive for individuals and businesses to finance and invest in clean, emission-free solar power.

The SRP provides registration for SREC and TREC for solar projects, including behind-the-meter and direct grid-supply projects connected to the New Jersey electric distribution system. The Generation Attribute Tracking System ("GATS") operated by PJM Environmental Information Services is used for tracking and trading of SREC and TREC, as well as, Class I and Class II RECs.

In FY21, the focus of the SRP will be to support the goals and objectives of New Jersey's solar polices, including implementation of the TIP and the anticipated solar successor program, which is under development by the Board.

FY21 Program Changes

The Board and its Staff have undertaken various activities to implement the Clean Energy Act. Those activities include various proceedings regarding the solar transition required by the Act as more fully explained under the *Transition Incentive and Successor Programs* section below. In FY21, TRC will coordinate with Board Staff to wind down and close out the SRP and to implement the TIP and Successor programs described further below.

Target Markets and Eligibility

Eligible solar technology is defined as a system that utilizes semi-conductor technologies to produce electricity directly from sunlight. All systems must meet program requirements regarding equipment certification, proper installation practices, and compliance with program procedures and processes. Solar PV systems connected to the electric distribution system serving New Jersey can participate in New Jersey's SREC SRP.

Offerings and Customer Incentives

The New Jersey SREC/TREC Registration Program provides a means for solar electric generation facilities to access the SREC/TREC market for SREC/TREC to be created and verified to allow

them to be sold or traded. Solar generating facilities that are interconnected with the electric distribution system in New Jersey and that meet all applicable rule requirements, as well as, all SREC/TREC Registration Program requirements will be eligible to generate NJ SREC/TREC upon successful completion of all requirements. The rules governing the submittal of new SRP and Final As-Built paperwork may be referenced at N.J.A.C. 14:8-2.4 and the rules governing TREC are under development by the Board. The SRP guidelines will continue to conform to these rules and will be modified as required to reflect any changes to the rules as they become effective.

In addition:

1. A web based solar portal will be used for submitting SRP registrations, providing a more streamlined and automated registration submittal and acceptance process.
2. The Program Manager will prepare monthly reports identifying program results and trends.

Planned Program Implementation Activities for FY21

The Renewable Energy Programs will have the following areas of focus in FY21:

1. Sustain the growth of New Jersey's solar markets, while communicating accurate and objective information on market development activity.
2. Monitor legislative and policy developments, inform the market of key outstanding questions and decisions (e.g. new RPS levels, net metering, etc.), and translate new policies into program operational procedures, as required.
3. Work with the Board and its staff to consider, develop, and implement possible programmatic changes, including those described below and otherwise implementing the Act.

Transition Incentive and Successor Programs

On May 23, 2018, the Clean Energy Act, L. 2018, c.17, codified at N.J.S.A. 48:3-51 to -87 (Act), became law. The Act, among other things, mandates that the Board close the SRP to new applications once it determines that 5.1% of the kilowatt-hours sold in the State have been generated by solar electric power generators connected to the distribution system (Milestone). The Board determined this milestone date was reached on April 30, 2020.

The Act also directed the Board to modify or replace the SRP with a new program to encourage the continued efficient and orderly development of solar generating sources throughout the State (Successor Program). Through several Orders and other means, the Board and its Staff have established TIP to provide a bridge between the legacy SRP and the Successor Program. The TIP will remain open until the adoption of a Successor Program. TRC is working closely with the Board and its Staff to establish the details and develop an online portal for accepting applications in the TIP.

The Successor Program is being developed by the Board and its Staff with input from stakeholders and the public.

Quality Control / Quality Assurance Provisions

All renewable energy systems facilitated through the SRP must be installed in accordance with program equipment requirements, program performance requirements, manufacturer

specifications, and provisions of the National Electrical Code ("NEC"). The installer is also required to meet SRP contractor license requirements.

Quality Control ("QC") serves as a check to ensure specific parameters of a renewable energy installation have been achieved. Quality Assurance ("QA") defines processes that ensure quality standards using efficient and cost-effective mechanisms.

The QA protocol requires diligence on the part of the "in-office" processing team to ensure the "Final As-Built" project information submitted as part of the final application paperwork is complete, correct, and in compliance with all program requirements. This review process is critical for the success of the QA function, which complements the on-site QC inspection process to ensure program compliance.

On-site verifications will be conducted for a pre-determined percentage of the SRP projects. An on-site verification will be performed for all grid-supply projects, all behind the meter projects with a capacity greater than 500 kW, and all add-on systems that add additional capacity or unique installations. The Program Manager may also conduct on-site verifications upon written request from the Board Staff or PJM-GATS to verify the cause for high meter reads or system production reading anomalies, and submit written explanation of the findings to the Board Staff and PJM-GATS.

A pre-determined percentage of the projects that receive an inspection waiver will be randomly selected for a more in-depth paperwork review. The Program Manager reserves the right to request additional information, including, PV watts, shading analysis, photos, etc.

TRC will utilize the Contractor Remediation Procedures, as necessary or appropriate, to address significant performance or other problems.

Goals and Renewable Generation

The SRP does not have specific program goals in terms of the number of participants, capacity, or quantity of solar electric generating systems installed. However, the SRP does support the goals outlined in New Jersey's RPS.

State Energy Program

Limited funding may be available from the U.S. Department of Energy for a State Energy Program ("SEP") grant which would allow fuel oil, propane, and municipal and cooperative electric utility customers – customers of non-investor owned electric and gas utilities – to participate in select NJCEP programs. Absent this supplemental funding, these customers are not eligible for NJCEP funding because they do not pay into the SBC. If available, funds will be provided on a first come, first-served basis.

Other than expiration dates related to the availability of SEP funds, existing program guidelines and rules related to NJCEP programs will apply. The Program Manager will process applications and provide general support for these initiatives, and the fees associated with administering the participation of these customers and processing these applications will be paid with NJCEP funds. Currently, SEP funding is expected to be available for the following programs:

- Residential Gas and Electric HVAC Program;
- Home Performance with ENERGY STAR; and
- C&I Direct Install.

Outreach, Website and Other

Outreach Plan

Executive Summary

This Outreach Plan ("Plan") supports NJCEP's broad range of incentive programs through the work of the TRC Outreach Team. This Plan highlights the tactics that the Outreach Team will use to raise awareness of these programs, educate potential program applicants, contractors, and stakeholders.

Newly added tactics for FY21 support the priorities and focus areas of BPU and include:

- Spanish educational outreach;
- Supporting environmental justice through dedicated and focused efforts to addressing underserved customers and communities including expanded minority outreach;
- Expanded outreach education; and
- Additional administrative and program support for BPU led initiatives and program transitions.

In addition to these new tactics, improvements have been made to the existing outreach tactics after gauging the market's interest and measuring success in FY20. The Outreach Team will continuously monitor success and adjust tactics and actions, as needed.

The addition of a Spanish-speaking outreach account manager will allow the Outreach Team to gain access to new markets within minority communities who were not previously accessible by the NJCEP Outreach Team. This support integrates with the other new tactics and goals of expanded education and addressing underserved customers and communities. Additional administrative and program support will be added, if necessary, to coordinate with BPU led initiatives and outreach around program transitions.

Background

During FY20, the Outreach Team completed its first year with a full complement of staff to better support the programs and engage with stakeholders across the entire state of New Jersey. This expansion had a positive impact on applications submitted, presentations given, energy savings, trade ally recruitment, BPU participation, and audit program participation. This FY21 Outreach Plan incorporates lessons learned from past years to focus on tactics that increase engagement and energy savings over FY20.

Highlights from FY20:

- Outreach activities took place in all 21 counties of New Jersey in FY20.
- The greenhouse gas emissions saved through Outreach generated energy efficiency projects installed in FY20 were the same as the greenhouse gas saved from 155 wind turbines running for a year (source: EPA Greenhouse Gas Calculator).
- Both Residential and C&I sectors surpassed the target number of applications submitted into programs as a result of Outreach by the third quarter of FY20.
- Worked with BPU and the products team to coordinate a launch event for distribution of free LED bulbs at food pantries. President Fiordaliso visited a pantry on the first day, as pictured.
- The Outreach Team had a presence at over 230 events across the state and engaged with over 6,300 participants (through June 2020).
- The percentage of LGEA projects that moved on to participate in NJCEP incentive programs increased from 35% to 46% (through June 2020).
- Delivered the first workforce development focused presentation to Sussex County Vocational Technical school students.
- Developed a comprehensive list of Community Action Agencies in NJ and provided them with a detailed presentation about the NJ Clean Energy Programs.
- Added a Spanish-speaking community-focused account manager to prepare initiatives before the start of FY21.

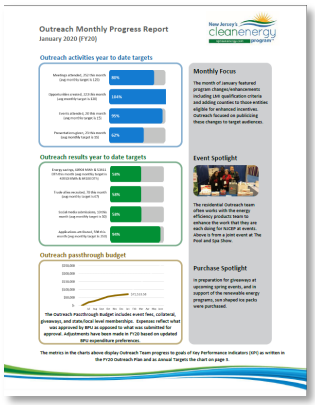
President Fiordaliso at Fisherman's Mark in Lambertville to kick off the food bank LED bulb distribution initiative.

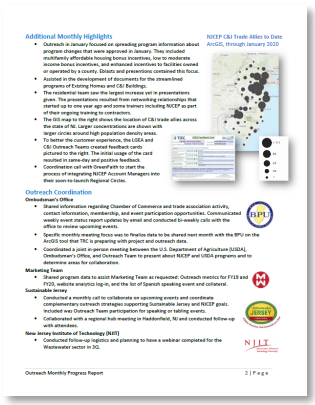
Hispanic Business Expo

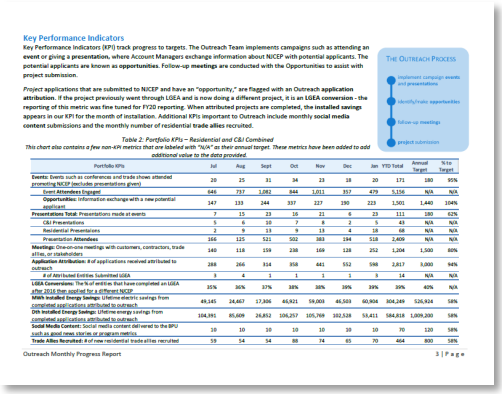
- Generated a realtor database and presented a webinar to the group.
- Worked with NJIT to develop new program-related informational videos and educational content for the Clean Energy Learning Center.
- Established communication with the new GreenFaith contact and presented at leader groups about benefits to residents, local businesses, and religious facilities.
- Developed monthly content for NJCEP/BPU social media feeds.
- Launched GIS as a tool to map outreach campaigns, opportunities, and projects.

Governor Murphy visiting the team at the Hispanic State Resource Fair

- Created a specialized GIS application for the Office of the Ombudsman to access data that is updated monthly.
- Redesigned the NJCEP presentation template and the NJCEP slides to have a more modern and streamlined messaging and appearance.
- Worked with the new Marketing Team to assist them in understanding the programs and program metrics.
- Pivoted work in March to accommodate the COVID-19 pandemic by assisting with program messaging, and by adapting the Outreach Team to reach the target markets virtually through webinars and targeted e-blasts rather than in-person events.
- Created an enhanced monthly reporting template and Progress to Goal ("PTG") slide template to depict outreach key performance indicators in an easy to read dashboard format as shown below.





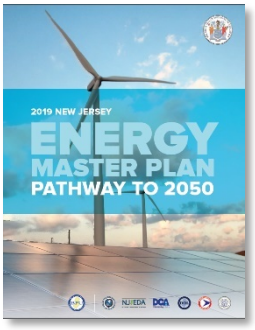


New Jersey's League of Municipalities

Sussex County Day & Hopatcong Fall for Our Town

Minority, Women, and Veteran Owned Business Expo

Outreach Goals



The Outreach Team supports the goals of NJCEP, as well as, those of BPU and the Administration, including:

- ***Support the Administration's goal of 100% clean energy by 2050*** – With the release of the 2019 New Jersey EMP, the Outreach Team's support of the Plan's strategies will play a crucial role in reducing our reliance on fossil fuels.

Table 6: Energy Master Plan Strategies versus Outreach Tactics

EMP Strategy	Outreach Tactics
1. Reduce Energy Consumption and Emissions from the Transportation Sector	▮▯▯
2. Accelerate Deployment of Renewable Energy and Distributed Energy Resources	▮▮▯
3. Maximize Energy Efficiency and Conservation and Reduce Peak Demand	▮▮▮
4. Reduce Energy Consumption and Emissions from the Building Sector	▮▮▮
5. Decarbonize and Modernize New Jersey's Energy System	▮▮▮
6. Support Community Energy Planning and Action with an Emphasis on Encouraging and Supporting Participation by Low and Moderate Income and Environmental Justice Communities	▮▮▮
7. Expand the Clean Energy Innovation Economy	▮▮▯

- ***Promote programs to customers, contractors, and trade allies*** – Representation of the Clean Energy Program in the marketplace for all programs and program enhancements. We will work across all target markets to ensure they have the necessary information and training to fully engage in the programs.
- ***Support Environmental Justice to underserved communities and customers*** – Work with BPU, other state agencies, and community organizations towards ensuring all customers have an equitable opportunity to learn about and use the programs.
- ***Support Marketing Team in promotional efforts*** – In collaboration with BPU and Marketing Team, ensure all outreach messaging is consistent with new marketing messages and themes. Program information will be shared as requested to highlight successes around program opportunities, successes, and events.
- ***Collaboration with BPU to reach specific sectors and customers*** – Jointly develop outreach strategies for specific sectors to leverage contacts and expertise.

The tactics outlined in this plan are intended to support these goals. The Key Performance Indicators ("KPI") listed below, and other indicators that will be included in monthly reports, will track progress toward these goals.

Target Markets

NJCEP programs are available to every resident, business, local government, and nonprofit entity in the State that is a customer of an Investor Owned Utility. Outreach efforts are intended to address this vast audience that is comprised of a variety of markets. The tactics described within this plan are designed to address these target markets to increase the reach and success of NJCEP programs.

Table 7: Market Category Definitions

Market Category	Definition
Customer	Homeowners, Property Owners/Managers, Renters, Businesses, NPOs, State, County & Municipal Government Entities, Schools
Contractor	HVAC & Insulation Contractors, Plumbers, Remodelers, Electricians, P4P Partners, DI and HPwES BPI Contractors
Trade Ally	Builders, Architects, HERS Raters, Consultants, ESCOs, Engineers, Realtors, Manufacturers, Distributers, Retailers
Stakeholder	Community Organizations, Membership Organizations, Green Teams, State Agencies, Chambers of Commerce, Business Associations
Partner	Sustainable Jersey, NJ Institute of Technology, GreenFaith, Utilities, EPA, DOE, USDA, DEP, County Improvement Authorities

Outreach Tactics

Tactics are how we achieve our goals. They are specific steps and action taken to support the outreach strategy and give structure to day-to-day activities. Most of the tactics employed in FY21 address the strategies of the EMP along with the Clean Energy Program portfolio at large. Some tactics are unique to markets and/or sectors as outlined below.

Spanish Educational Outreach

NEW in FY21

According to the U.S. Census Bureau, the State of New Jersey has the highest percentage of Spanish speaking households in the Northeast and is higher than the average in the United States. Limited Spanish outreach has been done in the past through Spanish language collateral and event representation with Spanish speaking staff. This is a relatively untapped market that will be a primary focus for FY21 in both the C&I and residential program areas.

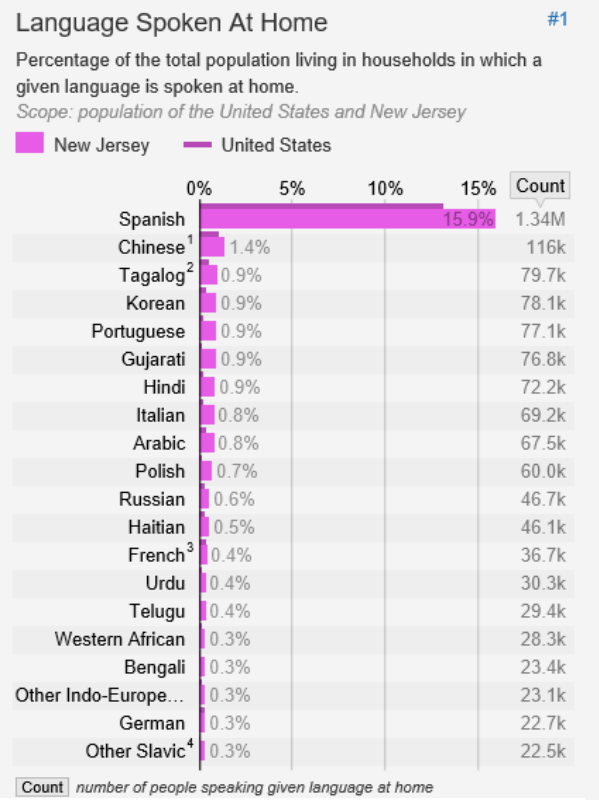


Chart source: Statistical Atlas / U.S. Census Bureau

This priority area will be developed by the Spanish-speaking account manager. This individual will focus on working with community groups and local businesses. This team member, will oversee coordination of this educational initiative to develop an expanded and updated set of Spanish language collateral, identify additional residential and C&I outreach events and presentations to this market, and generally be the point of contact. Outreach pass-thru funds have been set aside for professional translation services.

Although Spanish is clearly the main language spoken after English, the Outreach Team will work with any community organizations that have a request for NJCEP collateral in their specific language to offer translation services.

Support Environmental Justice through Dedicated and Focused Efforts to Address Underserved Customers and Communities

NEW in FY21

Ensuring all residents and businesses have an equitable opportunity to learn about and utilize the programs offered by NJCEP continues to be a cornerstone of the outreach effort. Specific plans to identify and engage with residents and businesses in underserved communities will continue with community organizations, state agencies, and local government agencies. In FY21, we will focus on adding more minority organizations and community-based organizations.

New Minority Organizations

Past involvement with minority organizations has included events targeted to women, the African American Chamber of Commerce, LGBTQ Chamber of Commerce, and events such as the Asian American Retailers Association and the Hispanic Business Expo. In FY21, additional outreach will be pursued with the Capital Region Minority Chamber of Commerce and the NJ American Conference on Diversity. As we work with more community level and general minority organizations, it is expected we will uncover additional organizations to collaborate with.

The focused Spanish-speaking team member will be able to expand on the network of organizations such as the Statewide Hispanic Chamber of Commerce of NJ and county level Latino American Chambers of Commerce. Outreach to these groups cannot be done without a Spanish speaking professional and adequate Spanish language collateral.

The markets will be researched, a plan will be put into place then contacts and initiatives will begin to allow for a focus on new minority organizations.

Community-Based Organizations

Working with community-based organizations offers unique opportunities to educate their members about the NJCEP with a more personalized and customized approach. The Outreach Team will in some cases have access to their contacts lists and the ability to host webinars and provide presentations to their members. This Outreach started in FY20 with initial contacts and a webinar for Community Action Agencies by utilizing the HUD list, UEZ zones, GreenFaith, and state agencies. Building on the success of this initial outreach effort, we will continue into FY21 to include a series of additional specialized webinars throughout the year.

The work with community-based organizations aligns with the enhanced program incentives available to Low to Moderate Income residents and residents located within designated Urban Enterprise Zones ("UEZ"), Opportunity Zone ("OZ"), and designated affordable housing facilities. Enhanced incentives are also available to businesses and local government facilities. Ongoing coordination with these groups will be a key component of continuing to promote the enhanced incentives as well as programs offered by NJCEP and the State including the Community Energy Grants, Community Solar, continued support for the food bank lighting initiative, and the expansion of NJCEP's Electric Vehicle Program that will target underserved communities.

Expanded Outreach Education

NEW in FY21

A key component of the Outreach Team is the education of residents and businesses on not only the Clean Energy Program offerings, but also on the environmental and financial impacts of program participation. Attending sustainability, networking, and industry related events focused on residents, trade allies, businesses, and local governments allows the Outreach Team to have successful exposure and attract the customers who we want to reach. The Outreach Team will also continue to look for speaking opportunities where we can reach larger audiences to present the programs. Additionally, the Outreach Team will continue to leverage and coordinate any speaking or event engagements with BPU, utilities, Sustainable Jersey, GreenFaith, and other partners.

In FY21, the educational components will be expanded to work with partners in creating specialized educational materials to support joint initiatives. Such materials will include toolkits,

collateral, trainings, and one-on-one assistance. During FY21, we will assess partner needs and develop delivery timelines in collaboration with them. We will also evaluate the level of education needed for each audience.

Toolkit Development to Outreach Partners

During FY21, we will offer to develop a customized toolkit to interested Outreach Partners, such as, membership organizations and community action agencies. These toolkits may include content for newsletters, social media, flyers, and presentations with customized messaging for homeowners and business sectors. GreenFaith has already shown a strong interest in having customizable toolkits to use with their regional Green Circles.

Toolkits are only as good as the support that comes with them. The Outreach Team will fully support the toolkits by matching them with any collateral, training, and one-on-one assistance that is needed. Part of the Outreach Passthrough Budget for FY21 has been set aside for educational assistance with costs associated with education to Outreach partners. All toolkits will be reviewed by BPU staff.

Customized Collateral Development

Customized collateral developed in FY20 was very well received within hard to reach verticals and for those that are challenged with navigating the program offerings. In FY21, the Outreach Team will identify additional verticals and groups that would benefit from customized collateral, such as a one-page summary sheet or a quarter page handout. The focused collateral can include an industry specific case study and which programs are most applicable. The Outreach Team will utilize BPU's one pager template using similar branding for the quarter page handouts. All collateral will be reviewed by BPU staff.

Additional customized collateral pieces that the public have already requested are below. Their purpose is to provide basic information and generate an interest to direct the reader to an Account Manager who can provide personalized guidance regarding program use and participation.

- **Multifamily Facilities:** A one page handout of how to navigate the current programs available for multifamily facilities. It will include a graphic showing the user where they can go within both the C&I and residential program offerings to best utilize all potential programs. Outreach specific contact information will be listed to receive more information and navigation assistance for this market sector.
- **NJCEP Overview:** A high level, one page handout that provides a general overview of the scope of both TRC and BPU run programs within the Clean Energy Program. This handout will act as a simple teaser to visually flag what is eligible for program incentives without going into the details of the programs. It would display programs in a way that prepares for the program transition. Contact information will be listed for more information.

Customized Training Series

Whether it is a one time training or a series of trainings, the Outreach Team will determine the educational needs of the audience. Following a record number of trainings and presentations in FY20, participants have asked for more. In FY21, we will respond to requests and continue to expand from our regular presentation to include seminars on how to fill out an application, provide additional trainings that are within standard technical certification programs, offer a training series on how the programs work, and more to develop our current trade ally network and to expand the number of trade allies who understand and participate in the programs.

Focused trainings will also be offered to touch on sectors that have not been emphasized in the past. The VoTech Schools will be targeted with a specialized presentation that has already been created and tested. The Multifamily sector has asked for assistance in understanding how to navigate the current program offerings. In response,we will create a joint webinar to be posted online on how to navigate the separate C&I and residential programs to receive the most incentives for multifamily buildings.

One-On-One Assistance

Successful outreach and education require regular follow-up and offers of assistance to ensure customers have what they need to understand the programs and allow projects to move ahead. Soliciting feedback from customers regarding their experience is also critical in allowing us to improve materials and programs, and to garner feedback on making the information finely tuned. One-on-one assistance will continue with residents, contractors, local governments, and businesses to help promote all programs.

Personalized assistance is a key component of the (LGEA. The LGEA program provides beginning-to-end customer engagement by offering program participants with energy audits that include recommended energy efficiency measures and then by providing guidance and assistance in implementing those measures. The LGEA Exit Meeting explains the energy audit to the customer and introduces the Outreach Account Manager. The Account Manager provides the post-audit interaction with the customer to answer questions, review the findings of the audit reports, and review the applicable incentive programs. assistance was first implemented in FY19 and has been very successful in increasing the participation rate in other programs from 30% to 46% during FY20. The decision-making process for LGEA customers can be influenced by member term limits, budgets, protocols, calendar restrictions, and other influences that, if not monitored, can lead to missed opportunities for implementing the findings of the audit reports. Account Managers help to ensure the opportunities are realized by engaging LGEA customers through their decision-making process, maintaining project focus, and offering program assistance as needed. This successful post-audit assistance will continue in FY21.

Support BPU Led Initiatives

BPU and TRC each have responsibility for developing and delivering components of the NJCEP. The Outreach Team's role is to bridge the gap so customers can navigate the program options that are most applicable to them. In doing this, the Outreach Team discuss with customers their needs and ensures they are aware of the entire Clean Energy Program portfolio. The Outreach Team will continue to refine the NJCEP presentation in order that the infographic and presentation flow addresses the audience appropriately based on their specific needs. The NJCEP portfolio overview

infographic is used in most presentations to give an overview of the all programs available before diving into the discussion topic of the core presentation.

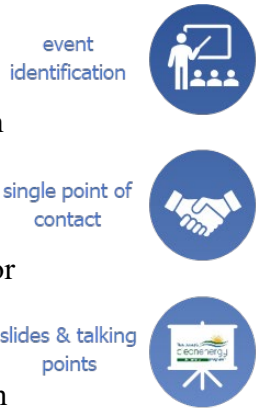
The Outreach Team stays up to date through BPU staff presentations of BPU led initiatives. Outreach Team members are able to answer high level questions about all BPU initiatives and can direct specific inquiries to BPU staff as needed. Many events that the Outreach Team already attends offer solid opportunities for the information sharing of BPU led initiatives. Like-minded customers tend to have overlapping interests in sustainability. This is why it is important for the TRC and BPU led initiatives to work together for consistent and comprehensive messaging. Two additional Outreach Staff have been allocated for FY21 should it be necessary to support BPU led initiatives and outreach around the upcoming program transitions at the account manager and coordinator levels. An example may be support of marketing team campaigns or leading campaigns for specific BPU programs, such as electric vehicles.

The Outreach Team coordinates and processes the purchases and expenses related to printing all program collateral. This includes collateral of BPU led initiatives. The Outreach Team ensures there is a current stock with BPU and Outreach Team members, as well as, at meetings and events where applicable.

BPU Support and Coordination

The Outreach Team will work closely with BPU Staff to ensure that the program messaging and event representation are aligned with priorities of the BPU. This includes regular status meetings to ensure BPU is aware of the outreach activities, events, and speaking opportunities identified for BPU Staff and/or Commissioners.

Support Commissioner Engagement



The BPU Commissioners have expressed interest in continuing their involvement in the promotion of the programs along with experiencing some of the interactions that take place between NJCEP participants and program staff. These engagements may include stakeholder meetings, presentations to trade organizations, presentations to member organizations, panelist opportunities at trade shows, meetings with large energy users or key accounts, meetings with other state agencies, ribbon cutting ceremonies for completed projects, customer acknowledgments for milestones achieved, and LGEA audit and report presentation exit meetings.

Commissioner participation supports the NJCEP and demonstrates program enthusiasm across the BPU. Commissioners receive feedback directly from participants and stakeholders. In FY21, we will continue to identify speaking opportunities for Commissioners and look for opportunities to engage them with customers on a one-on-one basis.

We will continue the "Commissioner Concierge" approach in FY21, with one Outreach Account Manager assigned to supply the Commissioners and their staff with a seamless speaking engagement experience. This concierge approach supports Commissioner events from beginning to end. The assigned Account Manager works with the Commissioners' staff to ensure they are

well prepared for their event. This involves supplying specific background details as defined by BPU speaking engagement templates, such as, presentation type and length, event agenda, speaking time window, bulleted program data points, and post-event networking opportunities. The Outreach Team will also provide site support for the Commissioners and their staff. Additional support requirements will be defined as required.

Coordinate with BPU Staff

Coordination with the Division of Clean Energy and Ombudsman's Office is critical to ensure our messages are consistent, that we are not duplicating efforts, and we are documenting both success and opportunities for additional communication and outreach. We will coordinate with BPU staff to support and monitor cross-team outreach efforts to community organizations, healthcare facilities, multifamily markets, and state agencies.

Regular reports, meetings, and calls will continue to address specific events and provide more in-depth knowledge into program information. We will continue to share event calendars and presentation content.

Outreach staff will attend meetings, site visits, or events as requested by the BPU staff. The Outreach Team will provide the relevant program presentation and materials for the meeting, in addition to, conducting any follow-up needed to assist the customer in using the programs.

Coordinate with Marketing Team

The Outreach Team will support the Marketing Team's marketing campaigns through data information requests along with program-specific plans. Collaboration will be critical as specific marketing plans are developed and implemented so the Outreach Team can be prepared to support and provide the data needed to help measure success.

The NJCEP branding and messaging that the Outreach Team uses will be consistent with the messaging of the Marketing Team. As the Marketing Team rolls out their plan for the year, the Outreach Team proposes having monthly meetings with the Marketing Team to understand their timelines and to prepare the program staff for the upcoming focuses and workload shifts.

Continue to Create, Develop, and Maintain Partnerships

Maintaining partnerships is key to ensure that the Outreach Team and Partners are aware of the other's initiatives and changes that occur. In FY21, we will continue to build upon our existing partnerships and pursue new partnerships that represent underserved communities or sectors, as well as, new trade specific membership organizations, chambers of commerce, and community organizations.

Existing Memberships and Partnerships

Sustainable Jersey

Ongoing coordination with Sustainable Jersey will continue to support their participants who are interested in NJCEP and offer program guidance to their Energy Team. Our efforts will include:

- Working with the nine Regional Hubs that bring together the Green Team representatives from all the participating towns in that region to share information

about the programs and develop coordinated plans to implement actions and measure success;
- Co-presenting webinars about NJCEP;
- Participate in the Sustainable Jersey Energy Task Force Meetings to ensure that the Outreach Team provides input regarding any updates to Sustainable Jersey relating to NJCEP initiatives;
- Coordinate with Sustainable Jersey on the monthly conference calls about upcoming events/conferences, and any inquiries they receive regarding NJCEP; and
- Advise Sustainable Jersey on the energy efficiency portion of their residential and C&I toolkits that municipalities use when doing outreach for Sustainable Jersey points in their towns.

County Improvement Authorities

While the roles of County Improvement Authorities vary from county to county depending on their enabling laws, they primarily support business retention and attraction for their respective territories. Some can provide financing and tax incentives, and most work closely with their municipalities to support local growth initiatives. Improvement authorities work closely with local chambers of commerce, rotary clubs, and business associations. They provide a platform to expose local government units and entities to programs that support their objectives. These organizations provided a valuable opportunity to promote the programs and helped to identify potential projects in FY20, especially when the enhanced incentives were offered to facilities owned or operated by a county. Account Managers will continue to connect with the improvement authorities in their region and pro-actively seek opportunities to participate in meetings, events, and help facilitate energy efficiency projects.

Investor Owned Utilities

Collaboration with the State's utilities is critical to providing customers with a clear and understandable path to undertaking energy efficiency projects and obtaining financial incentives to help mitigate the associated costs. Regional Account Managers will continue to build on those relationships and identify opportunities to co-promote program offerings and provide customer assistance. To improve coordination and communication with the utilities, we are now – and will continue to – prepare emails to utility contacts when there are public program changes to ensure that they are aware and to create a direct channel for answering questions. The Outreach Team will continue to conduct customer meetings with utility representatives and work with them to understand their program offerings so account managers know what is available to customers to provide guidance.

Organizations, State, and Federal Agencies

While we are currently active members in several organizations, such as: Shore Builders Association of Central NJ; Property Owners Association of NJ; NJ Association of School Business Officials; Housing and Community Development Network of NJ; Alliance for NJ Environmental Education; NJ Association of Counties; and several regional Chambers of Commerce, we will investigate new membership and partnership opportunities where we

can leverage more speaking engagements and promotional options (e.g., newsletter articles, success stories). This will include:

- Joining or partnering with sector-specific organizations, such as, the U.S. Green Building Council (USGBC), the Electric & Gas Industries Association ("EGIA"), and government agencies, such as, the U.S. Department of Energy and the U.S. Department of Agriculture;
- Actively participating in the Design Lights Consortium ("DLC") and any outreach or program committees that they offer; and
- Working with NJIT to enhance the Clean Energy Learning Center with educational content about programs.

New Memberships and Partnerships

A portion of the FY21 Outreach pass-thru budget has been set aside for new memberships with organizations as identified throughout at the year. With additional outreach to minority organizations, community-based organizations, and Spanish speaking groups, the Outreach Team will research the potential for additional memberships. These potential memberships will be assessed for the value that they provide the Clean Energy Program and the relevant focus of the membership audience. Memberships often allow the Outreach Team to attend meetings that provide brand exposure within industries and sectors. Some memberships allow for advertisements and inclusion in newsletters.

With the expanded outreach in underserved communities and within minority groups, it is also expected that additional memberships and partnerships will be acquired. As partnerships grow in FY21, there is a portion of the budget set aside to support partners for services such as language translation of materials and printing services.

Prepare the Market for Program Enhancements

Each fiscal year program changes and enhancements are implemented. The Outreach Team plays a critical role in preparing customers, contractors, trade allies and other stakeholders for these changes.

Program enhancements, which include enhanced incentives for eligible customers, were implemented in FY20 and will continue to be a FY21 focus, while some newer BPU led programs will be implemented in phases later during the year. Outreach related to enhanced incentives for those living in UEZ, OZ, affordable housing, and LMI will focus on identifying and contacting customers in zones, as well as, general awareness. Similarly, outreach related to the enhanced incentives for counties, municipalities, and K-12 public schools will be targeted to those potential participants.

Knowledge of program enhancements for FY21 will involve all market sectors. This effort will include:

- Development and delivery of training for contractors and customers;
- Development and delivery of informational webinars;
- Articles in newsletters;
- Presentations at conferences and trade shows;

- One-on-one customer engagement, including either in-person visits or virtual contact with residential HVAC supply houses and manufacturers, contractors, builders and architects;
- Website postings;
- E-mail blasts; and
- Updating all presentations and collateral materials.

The Outreach Team will coordinate with BPU staff as it develops these plans and tools.

Sector Specific Support

Engage Contractors & Trade Allies

Contractors and trade allies have direct and influential contact with potential NJCEP customers. Cultivating those relationships by soliciting feedback from them about their needs and the needs of their customers, as well as, their experience with the programs can help us to continually improve the customer experience and program quality. How we work with these contractors and trade allies may differ between those that primarily serve C&I customers and those that serve residential customers. The goals, however, are the same – to increase awareness and use of the programs, and minimize lost opportunities.

The C&I Outreach Team will continue to educate the contractors and trade allies through program e-blasts, one-on-one assistance, and presentations at professional organizations, events, and company lunch-and-learns. A continued focus on improving the performance of mid-tier contractors will continue to increase the number of applications they submit on behalf of customers and on looking for more specific opportunities to assist them in their ability to expand their business and close more sales. Tactics will include working with contractors and trade unions to deliver training series with a focus that includes, benefits of the programs, closing more energy efficiency projects by leveraging comprehensive NJCEP programs, and how to fill out an application. The one-on-one assistance whether provided via a phone call or virtual meeting or in person at a customer site is a key component to moving projects forward.

The Residential Outreach Team will continue to focus on maintaining and expanding the relationships with the HVAC industry, which involves engaging supply houses and working with manufacturers to interact with key staff. The Residential Outreach Team targets HVAC, insulation, and plumbing contractors among other professionals to participate in the WARM/COOLAdvantage and Home Performance with ENERGY STAR Programs. They successfully transitioned contractors from WARM/COOL paper applications to electronic applications and evaluated the number of incoming applications per contractor, which is an activity the Team will continue in FY21. They also provide coaching to contractors to submit more accurate and timely submissions via the online portal.

In FY21, it is crucial that outreach efforts are complemented with marketing efforts to transform the Residential New Construction marketplace to spark consumer demand for highly energy efficient homes in addition to encouraging builders to build ENERGY STAR certified and ZERH. The Account Managers will also continue to promote the programs at events, presentations, webinars, and trainings prioritized by the BPU and the Outreach Team.

For both residential and C&I programs, the Account Managers will provide support to the trade allies within their assigned regions or verticals.

Vertical Markets

The Clean Energy Programs cover a variety of sectors. Some require customized support to assist them in navigating the programs and understanding their opportunities for energy savings. The Outreach Team will support these sectors through participation in relevant trade shows, membership association meetings, and other events. Additionally, the team will reach out to individual customers within these sectors to better understand their needs and offer assistance. The development of customized program literature and guides will be a be component of this tactic in FY20. Sector specific support will be focused on low-to-moderate income residents, environmental justice communities, small businesses, local governments and schools, health care, data centers, and wastewater treatment facilities.

Residential and C&I Focuses

Residential Program Focuses

Residential Account Managers will continue to serve as an ongoing resource to contractors, builders, and other industry professionals to expand trade ally participation. They provide useful guidance, tools, and tips to navigate the process of becoming a participating trade ally, and they coach contractors to submit accurate applications. The Team will also continue to engage homeowners through speaking engagements, events, webinars, and engage community organizations emphasizing our programs in addition to LMI, UEZ, and enhanced incentives in FY21.

The team developed a portal demonstration webinar in FY20, which will be offered again in FY21. Additionally, thirty-minute webinars featuring technical and helpful information relevant to our programs have been developed and will be promoted and offered in the coming fiscal year.

The team has also developed webinars targeting remodelers with the goal of attracting them to participate in Residential New Construction in addition to our other residential portfolio of programs.

Residential Outreach will continue to offer and promote cooperative marketing, which serves as an incentive to becoming a participating trade ally. This supportive platform helps contractors target homeowners by drawing the homeowners to their companies and to the respective NJCEP programs they serve.

The residential team will support BPU-led initiatives and continue to cross-promote C&I programs to industry professionals and the general public.

C&I Program Focuses

C&I Outreach will give additional focus in FY21 to working with Spanish speaking customers, community organizations, and enhanced incentive projects located in UEZ, OZ, owned or operated by local governments and K-12 public schools. We will use our mapping tools to identify these customers and develop plans for communicating with them about the unique opportunities they will have to use the programs. We will create a new training series to focus on contractors and trade allies that represent and serve these groups while we continue the standard regional outreach that is conducted to businesses and local governments.

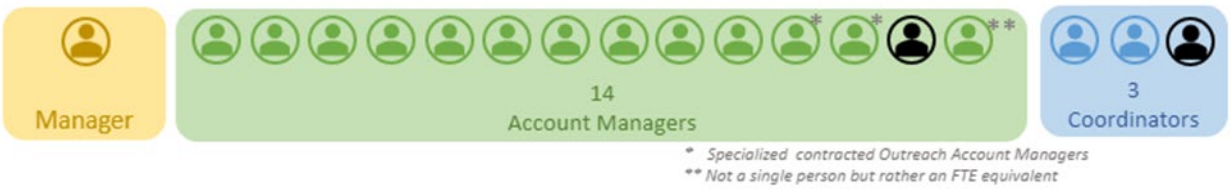
As we prepare for fiscal year program updates, we will work with our contractor and partner networks to help them prepare for the transition. In FY21 this becomes more important than in previous years because the team represents the larger portfolio of the NJCEP which encompasses both TRC and BPU led initiatives. We will also continue the efforts initiated in FY20 to work with segments of the healthcare industry, wastewater, and data centers, all of which have tremendous energy savings potential. Building upon our success during the past year, we will also continue our focus on LGEA customers to aid and guide the implementation of measures recommended. Finally, we will continually explore new opportunities to promote the programs to C&I customers, contractors, and trade allies.

We will continue our educational training series specific to market sectors to educate potential participants about the benefits and costs of participation and help identify the program path most-suited to each potential participant's needs and interests. We will represent the entire NJCEP portfolio at events and triage inquiries about BPU led initiatives to the BPU.

Delivery

The Team

The Outreach Team is comprised of an Outreach Manager, Account Managers, and Administrative Coordinators. This Team collaborates closely with BPU staff, and the market sectors identified above. In FY21, we are proposing the addition of 2 staff members in support of BPU programs as indicated below as black icons: one account manager and one coordinator. We will work with BPU staff to determine the need and timing for these staff members.



The Outreach Manager works with the BPU and the members of the Outreach Team to ensure that the tactics of this plan and the priorities of the Division of Clean Energy are accomplished. He or she ensures open communication between the Outreach Team and the BPU, as well as, regular reporting on Key Performance Indicators and Outreach event follow-up.

Outreach Account Managers are the cornerstone of the Outreach Team. Account Managers tailor engagement to participant knowledge and expertise while sharing techniques and equipment knowledge best suited for each unique project. Account Managers cover different regions of New Jersey, and some Account Managers also have specialties that span regions such as working with commissioners, technical fields, or industry-specific coverage. Some account managers will work specifically within verticals such as community organizations, Spanish speaking outreach, wastewater, data centers, and healthcare.

Many potential customers are located in designated UEZ and OZ or are residents of affordable housing or are low-to-moderate income qualified thus giving them a higher level of program benefits. This Plan broadens the distribution of program details to specifically include these segments of the market and create more comprehensive delivery of available incentives. Using a mix of regional and specialized focus approaches allows the Account Managers to build and strengthen local relationships by having a regular presence in the communities/territories/industries and a better understanding of the applicable customer bases and their unique needs.

The Administrative Coordinators play a key, office-based role in supporting Account Managers. Administrative Coordinators are a key communicator between professional organizations, event coordinators, the Outreach Team, and the BPU. The coordinators manage event logistics, supply literature and giveaways, and maintain the calendars of events and approvals as well as the purchase processing. Their role may require them to attend some events and presentations in support of Outreach Team activities.

Recommended Staff Enhancements

In FY21, the Outreach Team proposes adding the two additional Outreach positions outlined above to support the increased and specialized scopes of work outlined in this plan. Namely, one Account Manager and one Coordinator to be responsible for BPU led initiatives if needed. These roles may

span between many tasks including transition messaging, program equity, supporting the marketing team, or supporting the BPU programs such as Electric Vehicles.

Key Performance Indicators and Reporting

Key Performance Indicators

Several key performance indicators (KPI) have been developed to track the progress of the Outreach Team. The KPIs below are a sample of the metrics collected and reported monthly. Detailed reports will be provided to staff regarding progress toward goals, monthly planning, and other outreach activity. Additional details are provided in the monthly reports that are sub-metrics of these KPIs, such as the number of people engaged at events and presentations and the number of LGEA applications attributed to Outreach. The Team will continue to work with staff to refine these reports.

Table 8: Key Performance Indicators (9 months)

Portfolio KPIs	Monthly Target	Annual Target
Application Attribution: # of applications received attributed to outreach	479	4,311
MWh Installed Energy Savings: Lifetime electric savings from completed applications attributed to outreach	58,747	528,725
Dth Installed Energy Savings: Lifetime energy savings from completed applications attributed to outreach	88,086	792,772
Meetings: One-on-one meetings with customers, contractors, trade allies, or stakeholders	176	1,584
Events: Events such as conferences and trade shows attended promoting NJCEP	18	162
Spanish Events: Additional events focused on the Spanish speaking population	0.67	6
Presentations: Presentations made at events (not included in the above events)	19	171
Spanish Presentations: Additional presentations given in Spanish/ bilingual	0.5	5
Trade Allies Recruited: # of new residential trade allies recruited	75	675
LGEA Conversions: The % of entities that have completed an LGEA then applied for a different NJCEP		53%

Note 1: The above KPIs are based mainly on the averages of FY20 with the assumption that the Outreach Team will still be working virtually as they have been since March 2020 when FY21 begins on October 1, 2020. If work conditions change, these KPIs will be adjusted accordingly.

Note 2: In FY20, Social Media submissions were a KPI. This KPI was removed in FY21 since there is now a Marketing Team in place. Earlier in this plan is noted that the Outreach Team will coordinate with the Marketing Team to ensure that they have useful information needed from the programs.

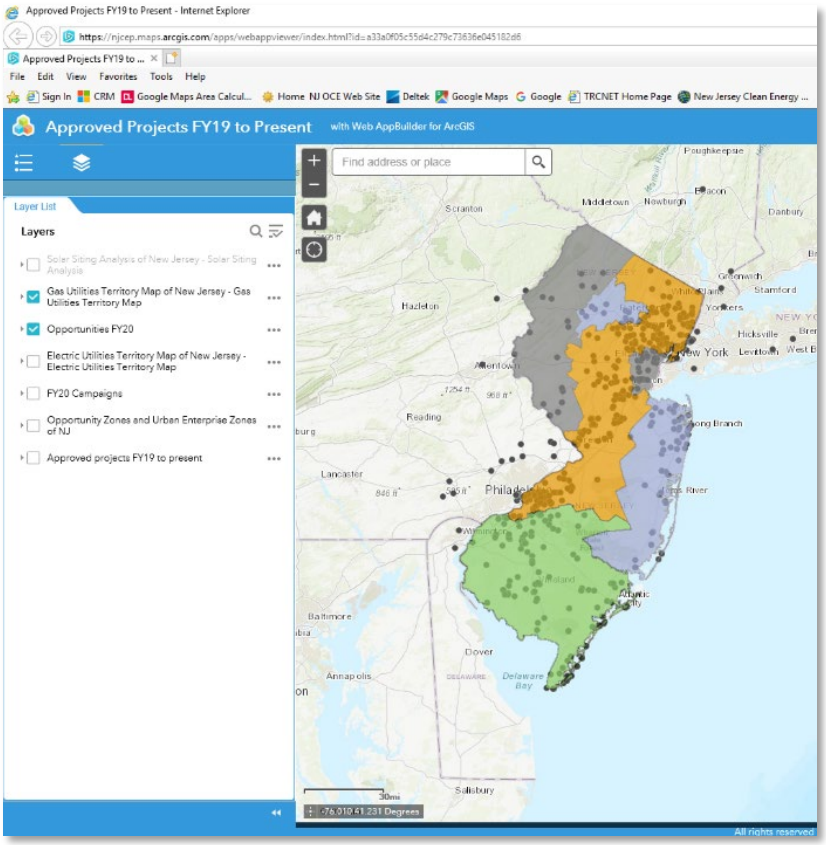
Reporting

We use a variety of tools to help inform the BPU staff and Commissioners about outreach activities. Report formatting will be addressed with input from NJCEP staff to ensure that it meets their needs for FY21. The Monthly Progress Report is the primary reporting tool. It contains a dashboard overview of KPI metrics and progress towards the goals. It highlights themes, events, and purchases completed throughout the month as well as joint planning initiatives and partner collaboration. Additional reporting includes invoice back-up, a list of approved program projects, and updates made to the Office of the Ombudsman custom ArcGIS application.

Geographic Reporting

A new geographic information system (GIS) reporting platform was developed and completed in FY20 to deliver monthly data regarding incoming projects and C&I Outreach Account Manager activity. This enhanced GIS application tool provided a new level of regional visualization that was used for internal planning and included in quarterly reports back to the BPU.

The application is accessible to C&I Account Managers and the BPU's Office of the Ombudsman on any mobile platform. Additional layers will be added at the request of the Office of the Ombudsman in order to coordinate efforts between their office and the Outreach Team. Data is updated monthly to include Outreach campaigns, opportunities, and project submissions. Maps are used as an outreach management tool and can be produced for BPU staff to include in presentations.



The Outreach Team manages the Ombudsman's Office ArcGIS access to "layers" such as these colored zones showing utility coverage and the black circles indicating new contractors and businesses with interest in NJCEP.

Rider A: Website

TRC will continue to host the New Jersey Clean Energy Program website.

A redesign of the website has been identified as a priority. The Outreach Team will provide support to those redesigning the site, and it will continue to provide feedback from interactions with trade allies and the public. We expect an improved design will better reflect how customers and partners use the site, making it easier for them to find the most frequently used documents, submit applications, and identify new content. The new website will not only provide a better user experience, but also provide logical points of engagement along the customer's journey through website analytics.

Rider B: Outreach Pass-Through Budget

The Outreach Pass-through budget includes support for activities such as memberships and expenses related to events, sponsorships, etc.

Examples of expenses that support our Outreach efforts may include the cost of booth space at a trade show, registration costs, NJCEP promotional giveaways, sponsorship at events and local chamber of commerce meetings, advertisements at events where Outreach staff will be attending, printing of program collateral, or translation services of program information/collateral. All expenses are approved in advance by BPU staff.

Appendix A: Residential Incentives (including Enhancements)

Existing Homes: COOLAdvantage and WARMAdvantage Incentives

Table 9: COOLAdvantage Customer Incentives[26]

Equipment	Minimum Requirements	Incentive Amount per Unit
Central Air Conditioner- Tier 1	SEER ≥16 EER ≥ 13	$300
Central Air Conditioner- Tier 2	SEER ≥ 18 EER ≥ 13	$500
Central Air Source Heat Pump- Tier 1	SEER ≥ 16 EER ≥ 13 & HSPF ≥ 10	$600
Central Air Source Heat Pump- Tier 2	SEER ≥ 18 EER ≥ 13 & HSPF ≥ 10	$1,000
Mini-Split Air Conditioner	SEER ≥ 20 EER ≥ 12.5	$500
Mini-Split Cold Climate Heat Pump- Single ductless indoor unit	SEER ≥ 20 EER ≥ 12 & HSPF ≥ 12 with COP @5˚F ≥ 1.75 (at maximum capacity operation) Must meet all performance parameters and submit manufacturer's heat pump performance information for COP @ 5˚F.	$1,000

[26] From AHRI directory, CEE-AHRI directory, manufacturer's specifications, or equivalent ENERGY STAR listing. For the avoidance of doubt, the equipment description in these sources will be applied regardless of how the applicant intends to use the equipment. For example, if the AHRI certificate describes a unit as a "heat pump," it will be subject to the minimum requirements applicable to a heat pump even if the applicant intends to use it only as an air conditioner.

Equipment	Minimum Requirements	Incentive Amount per Unit

Mini-Split Cold Climate Heat Pump –Multi (≥2) or ducted indoor units Or Cold Climate Central Air Source Heat Pump	SEER ≥ 18 EER ≥ 12 & HSPF ≥ 10 & COP @5˚F ≥ 1.75 (at maximum capacity operation) Must meet all performance parameters and submit manufacturer's heat pump performance information for COP @ 5˚F.	$2,000
Air-to-Water Heat Pump	COP @ 5˚F ≥ 1.75 (at full load capacity @ 110˚F water temp) & IPLV ≥ 18 if unit is capable of proving cooling Must be installed to provide indoor space heating and meet all performance parameters and submit manufacturer's heat pump performance information	$2,000
UEZ/AH/LMI Bonus		**$200/measure**

Table 10: WARMAdvantage Customer Incentives[27]

Equipment	Minimum Requirements	Incentive Amount per Unit
Gas Furnace – Tier 1	≥ 95% AFUE	$250
Gas Furnace – Tier 2	≥ 97% AFUE	$500
Oil Furnace	≥ 85% AFUE	$250
Gas Boiler	≥ 90% AFUE	$300
Oil Boiler	≥ 87% AFUE	$300
Gas Storage Tank Water Heater, power vented	≤ 55 gallons 0.64 Uniform Energy Factor (UEF) >55 gallons 0.85 UEF	$300
Gas Tankless On-demand Water Heater <2 gallons	0.90 UEF	$300
Heat Pump Water Heater	2.0 UEF	$750
Boiler and Water Heater Combination	≥ 90% AFUE boiler for space heating, plus integrated domestic hot water within one compact unit (combi-boiler) OR an indirect-fired water heater attached to the qualifying boiler	$700
Furnace and Water Heater Combination[28]	Qualifying Gas Furnace (see Minimum Efficiency for Furnaces noted above), plus a qualifying standalone water heater (see Minimum Efficiency for water heaters above)	$700 (Gas Furnace Tier 1, see Water Heater) $950 (Gas Furnace Tier 2, see Water Heater)
UEZ/AH/LMI Bonus		$200/measure

[27] From AHRI directory, CEE-AHRI directory, manufacturer's specifications, or equivalent ENERGY STAR listing.

[28] This is the total combined incentive amount for qualifying furnace and hot water heating equipment, and may not be combined with individual NJCEP incentives for furnaces or water heaters.

Existing Homes: Home Performance with ENERGY STAR Incentives

Table 11: HPwES Single-Family Incentives and Requirements

Incentive Tier	Requirements	Customer Incentive	Contractor Incentive
Tier 1	Energy audit only	No incentives	No incentives
Tier 2	Estimated total energy savings from all work must total at least 5% but less than 20%. Must install attic air sealing. Must install a minimum 6-inches insulation upgrade in the accessible area of the attic if the existing insulation is <7-inches May also install water heater measures from the Eligible Measures List. Heating and A/C equipment is not eligible	Cash rebate of 50% of the costs of the measures used to calculate TES up to $2,000. 0% financing up to $5,000 where a utility financing offer is unavailable.	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, a $500 production incentive will be paid to the contractor.
Tier 3	Level 1. Estimated total energy savings from all work must total at least 20% but less than 25%. Must install attic air sealing. Must install a minimum 6-inches insulation upgrade in the accessible area of the attic if the existing insulation is <7-inches. May include additional measures from the Eligible Measures List.	Cash rebate of 50% of the costs of the measures used to calculate TES up to $3,000. Either 0% financing up to $10,000 or 0.99% financing up to $15,000, where a utility financing offer is unavailable.	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, a $500 production incentive will be paid to the contractor.

Incentive Tier	Requirements	Customer Incentive	Contractor Incentive
	Level 2. Estimated total energy savings from all work must total at least 25%. Must install attic air sealing. Must install a minimum 6-inches insulation upgrade in the accessible area of the attic if the existing insulation is <7-inches. May include additional measures from the Eligible Measures List.	Cash rebate of 50% of the costs of the measures used to calculate TES up to $4,000. Either 0% financing up to $10,000 or 0.99% financing up to $15,000, where a utility financing offer is unavailable.	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, a $500 production incentive will be paid to the contractor.

Table 12: HPwES Multifamily Incentives and Requirements

Incentive Tier	Requirements	Customer Incentive	Contractor Incentive
Tier 1	Energy audit only	No incentives	No incentives
Tier 2	Estimated total energy savings from all work must total at least 5% but less than 15%. Must install attic air sealing. Must install a minimum 6-inches insulation upgrade in the accessible area of the attic if the existing insulation is <7-inches. May also install water heater measures from the Eligible Measures List Heating and A/C equipment is not eligible.	Cash rebate of 50% of the costs of the measures used to calculate TES up to $500 per unit.	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, the contractor will be paid a $50 production incentive per unit.
Tier 3	Level 1. Estimated total energy savings from all work must total at least 15% but less than 20%. Must install attic air sealing. Must install a minimum 6-inches insulation upgrade in the accessible area of the attic if the is existing insulation is <7-inches. May include additional measures from the Eligible Measures List.	Cash rebate of 50% of the costs of the measures used to calculate TES up to $1,000 per unit.	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, the contractor will be paid a $50 production incentive per unit.

Incentive Tier	Requirements	Customer Incentive	Contractor Incentive
	Level 2. Estimated total energy savings from all work must total at least 20%. Must install attic air sealing. Must install a minimum 6-inches insulation upgrade in the accessible area of the attic floor if the existing insulation is <7-inches. May include additional measures from the Eligible Measures List.	Cash rebate of 50% of the costs of the measures used to calculate TES up to $1,500 per unit.	Upon satisfactory project completion, including meeting program guidelines for quality work and addressing health/safety issues, the contractor will be paid a $50 production incentive per unit.
UEZ/AH/LMI Bonus		Additional $500, $750, $1,000 for Tier 2, Tier 3-Level 1, and Tier 3-Level 2, respectively. Further, the applicable cap is 80%, not 50%, of the cost of the measures.	

HPwES Incentives and Requirements Notes:

1. Customers replacing heating and/or central cooling systems who receive incentives for their new HVAC systems through the NJCEP HPwES Program may not apply for or receive additional incentives from the NJCEP *WARM/COOL*Advantage program.
2. Insulation installations must comply with the requirements detailed in the NJ HPwES Eligible Measures document. Where there is no existing attic insulation, must install R-49 attic insulation as prescribed by New Jersey code. Where attic flooring is installed with existing insulation <7 inches and the gap between the existing insulation and the flooring is >2 inches, insulation upgrade must be installed to fill the cavity. (To the degree there is any inconsistency between this note and the subject tables, this note shall control.)
3. NJ utilities may offer a 0% loan or on-bill repayment plan up to $10,000 or 0.99% financing up to $15,000 for Tier 3 projects and/or $5,000 for Tier 2 projects to underwrite the non-rebated portion of the customer cost for HPwES projects in their service territories. NJCEP will provide the financing described in the table above for Single-Family projects where a utility loan or on-bill repayment program is not in place or in instances where a utility customer has been denied through the utility program.

4. NJ utilities may fund HPwES incentives for Tier 3 and/or Tier 2 projects in their service territories. NJCEP will continue to provide incentives for any project where a utility incentive program is not in place or does not cover the full incentive amount due as scheduled in the table above.
5. The Program Administrator and the Division of Clean Energy will continue to process and pay incentives from funds supplied by other sources as they may become available.
6. Appliances, lighting, doors, and windows are not eligible for Program incentives.
7. The measures used to calculate TES may also include health & safety measures and qualified accessories, as listed on the NJ HPwES Eligible Measures document, as a component to the installations of Eligible Measures.
8. Projects will continue to have expiration dates. The contractor will need to re-enroll projects to the program following the Auto Proceed process for projects not completed and submitted to the program prior to their expiration date, and will be eligible for the incentive levels available at the time of re-enrollment.
9. The Contractor production incentive will be eliminated if the project fails an initial quality control field inspection. In addition, the contractor will be locked out of the Auto Proceed process if project issues remain unresolved for more than 30-days from the time they are notified of the failed inspection. As soon as the issues are resolved, the contractor will be unlocked from the software. The elimination of the contractor incentive will not be applied to new contractors for their first ten inspections.
10. Incentives are payable only upon satisfactory project completion.
11. A NJ homeowner may apply for a second HPwES project at the same site (home/townhouse) only under the following conditions: 1) The contractor must perform a new audit based on the existing conditions of the home after the first completed HPwES project; and 2) The total incentives from both projects cannot exceed current HPwES incentives caps based on the second project's estimated total energy savings (TES). These rules only apply to a single homeowner for the length of the home ownership. A NJ homeowner may apply for a second HPwES project at a different site (home/townhouse).

Table 13: HPwES Pilot Components Incentives

Air Sealing and Insulation Pilot Component	The lesser of: 1. 50% of total project cost; or 2. $500 for each of (a) air sealing and (b) installing any type of insulation.
Residential Direct Install Pilot Component	$50 paid to the installation contractor; the energy efficiency measures would be provided and installed at no cost to the consumer

Residential New Construction

Table 14: Financial Incentives per Unit for ENERGY STAR Certified Homes, ENERGY STAR Multifamily New Construction, Zero Energy Ready Home, and Zero Energy Home + RE

	Single Home (i.e., 1 & 2 family)	Multi-Single (i.e., Townhouse)	Rater Incentive	Multifamily	MFHR
ENERGY STAR	$1,000 + $30/ MMBtu	$500 + $30/ MMBtu	N/A	$500 + $30/ MMBtu	$500 + $30/ MMBtu
ZERH	$4,000 + $30/ MMBtu	$2,500 + $30/ MMBtu	$1,200 (single & multi-single only)	$1,500 + $30/ MMBtu	N/A
ZERH +RE	$4,000 + $30/MMBtu + $2,000	$2,500 + $30/MMBtu + $1,500	$1,200 (single & multi-single only)	$1,500 + $30/MMBtu + $750	N/A
UEZ/AH Bonus	+$500 (add to any level above)	+$500 (add to any level above)	N/A	N/A	N/A

Notes to the table immediately above:

- The above $30/MMBTU is based on savings before any savings from Renewable Energy. MMBtu is the incremental annual MMBtu saved as compared to the calculated annual usage of the baseline, reference home defined by the applicable energy code, all as described in more detail in the RNC Incentives section of this Compliance Filing.
- This table is only for Dwelling Units and single-room occupancy (SRO) units. As relevant to this table, SROs are limited to buildings of less than five (5) units; buildings with five (5) or more SRO units may be eligible to participate in P4P or other C&I Programs
- New multifamily buildings having less than five (5) Dwelling Units are eligible for this RNC Program.

EEP: Lighting, Appliance, Consumer Electronics, Showerhead, and Weatherization Products Incentives

Table 15: Lighting Program Incentives

Product Type	Subtype	Maximum Per Bulb/Fixture Incentive
Standard LED	Standard Omni A-Line	$3.00
Specialty LED	BR, Globe, PAR, R, Torpedo, Flame Tip, Other Decorative, 3-way	$5.00
LED Fixture	Retrofit Kit, Portable, Hardwire	$8.00

Table 16: Appliances and Consumer Electronics Incentives

Equipment	Incentive Tiers	Performance Criteria (subject to change based on ENERGY STAR specifications)	Rebate	Rebate Type
Clothes Washer	Tier 1 (Aligned with ENERGY STAR V8.0)	Baseline ENERGY STAR	$50	Downstream
	Tier 2 (Aligned with ENERGY STAR Most Efficient)	15% over the measured Federal Minimum Efficiency Standard	$75	Downstream
Clothes Dryer	Tier 1 (Aligned with ENERGY STAR V1.1 Gas)	Baseline ENERGY STAR	$100	Downstream
	Tier 1 (Aligned with ENERGY STAR V1.1 Electric)	Baseline ENERGY STAR		
	Tier 2 (Aligned with ENERGY STAR Most Efficient)	15% over the measured Federal Minimum Efficiency Standard	$300	Downstream
Refrigerator	Tier 1 (=>7.75 cu ft.) (Aligned with ENERGY STAR V5.0	Baseline ENERGY STAR	$50	Downstream
	Tier 1 Compact (<7.75 cu ft) (Aligned with ENERGY STAR V5.0)	Baseline ENERGY STAR	$25	Downstream
	Tier 2 (Aligned with ENERGY STAR Most Efficient)	15% over the measured Federal Minimum Efficiency Standard	$75	Downstream
Advanced Power Strip	Tier 1	Provides standby power management	$15 (Maximum)	Upstream
	Tier 2	Provides active power management	$40 (Maximum)	Upstream
Air Purifiers	ENERGY STAR V1.2	Baseline ENERGY STAR	$50	Downstream
Dehumidifiers	ENERGY STAR V5.0	Baseline ENERGY STAR	$25	Downstream
Room ACs	ENERGY STAR V4.1	Baseline ENERGY STAR	$15	Downstream

Table 17: Showerhead Incentives

Product Type	*Subtype*	*Maximum Per Item Incentive*	*Rebate Type*
Showerhead	Fixed and Handheld	$9.00	Upstream

Table 18: Weatherization Incentives

Product Type	Units	Maximum Incentive Per Item	Rebate Type
3 Foot Door Sweep	Each	$3.00	Upstream
Door Frame Seal	Per foot	$0.30	Upstream
Insulating Foam Sealant	Per spray can	$2.00	Upstream

Table 19: Appliance Recycling Incentives

Product Type	Terms (n/a to Multifamily Bulk Recycling)	Incentive	Rebate Type
Refrigerator/Freezer	Limit 2 TOTAL per year per residential customer	$50	Downstream
Room Air Conditioner (RAC)/Dehumidifier	Limit 2 of each type of appliance per year per residential customer	$25	Downstream

Appendix B: Commercial and Industrial Incentives (including Enhancements) and General Rules

Extension Policies

Many programs include deadlines for submittal of information. For example, some programs require the submittal of a final application within six months or one year from the date of the letter approving the initial application. NJCEP provides for extensions of deadlines provided certain conditions are met. Program Managers in general are authorized to approve first and, in some cases, second, extensions. Additional standards/guidelines for approving extensions and/or reinstatements are set out in the Compliance Filings and in the Guidelines established for each program. The PA, with the approval of Board Staff, may approve up to two extensions, each of a length set by the PA with the approval of Board Staff, beyond the extensions the Program Managers are authorized to approve.

C&I / DER Incentive Caps

Incentive caps have been established to ensure that there is equitable access to the C&I, and DER programs for all qualifying customers. These caps have been established because of the potential scale of commercial/industrial projects, where a few extremely large projects could otherwise consume a significant share of the available budgets, leaving other customers unable to access project funding.

Program / Project Incentive Caps

C&I New Construction & Retrofit and Customer Tailored Energy Efficiency - $500,000 per electric account and $500,000 per natural gas account, per fiscal year. A customer is defined as a utility account.

Pay for Performance - The total of Incentives #1, #2, and #3 combined shall not exceed $2,000,000 per project, assuming both electric and natural gas measures are recommended and implemented. Should only electric measures, or only gas measures, be recommended and implemented, then the total of Incentive #1, #2, and #3 combined shall not exceed $1,000,000 per project. For the avoidance of doubt, the foregoing would place a $1,000,000 per project cap on electric-only facilities. Entity caps also apply.

Large Energy Users Program – LEUP participants will be limited to the lesser of $4 million per eligible entity per fiscal year, 90% of calculated NJ Clean Energy Program contribution, 75% of eligible project cost or $0.33/kWh and $3.75/Therm saved annually.

Local Government Energy Audit Program – LGEA participants will be held to a fiscal year entity cap of $100,000 per entity, subject to the exceptions set forth in the specific LGEA Program Description in this document.

Direct Install – See the Direct Install, Program Offerings and Incentives section of this Compliance Filing.

CHP-FC

See Appendix C.

C&I / DER Entity Incentive Caps

If an entity brings more than one project through NJCEP in any given fiscal year, it will be held to an Entity Cap of $4,000,000 (Entity Cap) for that fiscal year, in addition to the other incentive caps described above. Each Program's and/or Path's milestones for determining when incentives count towards an Entity Cap for a given fiscal year are as follows:

- Application approval - Retrofit, New Construction, Combined Heat and Power, Customer Tailored
- Energy Reduction Plan / Proposed Energy Reduction Plan approval - Pay for Performance / Pay for Performance New Construction
- Final Energy Efficiency Plan approval - Large Energy Users
- Fully executed Scopes of Work - Direct Install

Incentives under any NJCEP Commercial & Industrial and Distributed Energy Resources Program(s), except the Local Government Energy Audit Program, count toward the Entity Cap. A fiscal year is a fiscal 12-month period from July 1 – June 30. Once the Entity Cap in a given fiscal year has been reached, the earliest an entity may apply for subsequent incentive funding is July 1 of the next fiscal year. For example, if an entity reaches its Entity Cap on March 15, 2019, it must wait until at least July 1, 2019, the first day of the fiscal year, to apply.

In addition, Large Energy Users are subject to additional C&I / DER Entity Caps consisting of the lesser of:

- $4,000,000; or
- 90% of total NJCEP fund contribution in previous year (i.e. from all entity facilities), provided, however, that an applicant may choose to bank and combine up to two (2) consecutive years of total NJCEP fund contributions for the purpose of calculating its maximum incentive in a given fiscal year, provided the applicant has not participated in LEUP in the fiscal year immediately preceding the subject application. By way of example only, if a participant in FY19 contributed $500,000, in FY20 contributed $600,000, and in FY20 did not submit a LEUP application, the applicant's maximum incentive for a project in FY21 would be no more than $990,000 (.9 x (500,000 + 600,000)).

Total Cost Incentive Cap

In addition to the specific caps outlined above, no project shall receive incentives from one or more NJCEP programs and/or Board-approved utility programs in an amount that exceeds the total cost[29] of measures installed or performed.

Enhanced Incentive

An applicant will be eligible for an enhanced incentive equal to an additional 100% of the incentive values set forth in the tables below (**other than those that set forth incentives for Performance Lighting, Prescriptive Lighting, and Lighting Controls, i.e., Table 41 through Table 48**), subject to a cap of the applicant's cost for the project (material and labor) and to any other caps set

[29] Total cost is usually determined by reference to a sales invoice. It is not, for example, impacted by federal tax credits that will become available to the applicant on its next tax return or grants from sources other than NJCEP or Board-approved utility programs.

forth in this Compliance Filing, for a project that is installed at an existing building that meets either of the below criteria:

1. Is located within a designated UEZ or OZ. As used in this Compliance Filing, a UEZ is as identified on the New Jersey Department of Community Affairs website https://www.nj.gov/njbusiness/financing/uez/ and an OZ is also as identified on NJDCA's website https://www.state.nj.us/dca/divisions/lps/opp_zones.html#where; or
2. Is Affordable Housing ("AH"). As used in this Compliance Filing, AH means any housing that an official document identifies as participating in a federal, state, or local affordable housing program, including, by way of example only, the New Jersey Department of Community Affairs listing of Affordable Housing available here https://www.state.nj.us/dca/divisions/codes/publications/developments.html, as well as official documents showing identification by the documents regarding New Jersey Housing and Mortgage Finance Agency, United States Low Income Housing Tax Credit ("LIHTC"), and United States Housing and Urban Development ("HUD").; or
3. Is owned or operated by a public K-12 school or county or municipal entity.

Existing buildings that meet either of the above criteria, and the related enhanced incentives, are sometimes referred to as UEZ/AH/Public in this Compliance Filing.

For the avoidance of doubt:

- Applicants must also follow all program rules as outlined in the Program Guide and application Terms and Conditions; and
- Performance Lighting, Prescriptive Lighting, and Lighting Controls are not eligible for Enhanced Incentives.

C&I New Construction and Retrofit Incentives & General Rules

Custom Measures

- Performance incentives of $0.16/kWh and $1.60/therm of first year savings, 50% of total installed project cost, or buy down to 1-year payback, subject to enhancement, where applicable, pursuant to the table immediately below. Based on estimated savings as approved by the Program Manager.
- Proposed retrofit projects must meet or exceed ASHRAE 90.1-2016 where applicable. In cases where ASHRAE standards do not apply, the Program will require that custom measures must meet or exceed industry standards per the Consortium for Energy Efficiency ("CEE"), EPA ENERGY STAR, and/or others. For New Construction and major gut renovation projects, the proposed measure(s) must exceed ASHRAE 90.1-2016 standards, or other standards (CEE, EPA, Etc.) where applicable.

Table 20: C&I Custom Measure Incentives

Equipment Type	Incentive Cap	Incentive Amount	Enhanced Incentives (Total of Base plus Enhanced Incentive)
Custom Measures	First-Year Savings Cap	Electric Savings: $0.16/kWh	Electric Savings: $0.32/kWh
		Gas Savings: $1.60/therm	Gas Savings: $3.20/therm
	Project Cost Cap	50% of Total Installed Project Cost	80% of Total Installed Project Cost
	Buy-Down Cap	Amount to buy-down to 1-year payback	Amount to buy-down to 1-year payback

Electric Chillers

- **Note A** - The manufacturer's published chiller efficiency must be determined using the Air-Conditioning, Heating and Refrigeration Institute ("AHRI") 550/590 test procedures and at the AHRI standard evaporator and condenser temperatures. If an applicant has a water-cooled centrifugal chiller that is designed to operate at other than the AHRI standard conditions the procedure in Standard 90.1-2016, Section 6.4.1.2.1 may be used by the applicant to adjust the manufacturer's published efficiency at non-AHRI conditions to the efficiency at AHRI standard conditions. The applicant will need to provide the manufacturer's non-AHRI ratings as well as the calculations for the chiller efficiency at AHRI conditions.
- Constant speed chillers will have to meet or exceed IPLV efficiency to qualify for the incentive program while the incentive will be based on the chiller's performance relative to the full load efficiency. Conversely, variable speed chillers will have to meet or exceed

the full load efficiency to qualify for the incentive program while the incentive will be based on the chiller's performance relative to the IPLV efficiency.

- Electrically operated comfort cooling air-cooled and water-cooled chillers are eligible for incentives under the prescriptive path. Chillers for process cooling (e.g. manufacturing, data center, food storage or processing, et cetera) loads may apply for an incentive under the custom path.
- Performance Incentives apply for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton.
- For new construction projects operating under ASHRAE 90.1-2016 code, proposed equipment must exceed minimum program efficiency requirements for Path A (constant speed) IPLV and Path B (variable speed) Full Load.
- Performance Incentives apply for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton.
- For new construction projects operating under ASHRAE 90.1-2016 code, proposed equipment must exceed minimum program efficiency requirements for Path A (constant speed) IPLV and Path B (variable speed) Full Load.

Table 21: C&I Electric Chiller Incentives

Equipment Type	Capacity	Existing Buildings				New Construction			
		Constant Speed		Variable Speed		Constant Speed		Variable Speed	
		Base $/ton	**Performance $/ton**	**Base $/ton**	**Performance $/ton**	**Base $/ton**	**Performance $/ton**	**Base $/ton**	**Performance $/ton**
Air Cooled Chiller	tons < 150	$20.00	$3.50	$90.00	$4.00	$10.00	$3.50	$45.00	$4.00
	tons ≥ 150	$20.00	$2.75	$92.00	$4.00	$10.00	$2.75	$46.00	$4.00
Water Cooled Chiller, Positive Displacement	tons < 75	$13.00	$2.25	$40.00	$2.50	$6.50	$2.25	$20.00	$2.50
	75 ≤ tons < 150	$20.00	$2.00	$43.00	$2.00	$10.00	$2.00	$21.50	$2.00
	150 ≤ tons < 300	$17.00	$2.00	$43.00	$2.00	$8.50	$2.00	$21.50	$2.00
	300 ≤ tons < 600	$15.00	$2.25	$37.00	$2.00	$7.50	$2.25	$18.50	$2.00
	tons ≥ 600	$30.00	$2.00	$44.00	$2.00	$15.00	$2.00	$22.00	$2.00
Water Cooled Chiller, Centrifugal	tons < 150	$24.00	$2.25	$24.00	$2.75	$12.00	$2.25	$12.00	$2.75
	150 ≤ tons < 300	$10.00	$2.00	$30.00	$2.50	$5.00	$2.00	$15.00	$2.50
	300 ≤ tons < 400	$8.00	$2.00	$20.00	$2.00	$4.00	$2.00	$10.00	$2.00
	400 ≤ tons < 600	$8.00	$2.00	$25.00	$2.00	$4.00	$2.00	$12.50	$2.00
	tons ≥ 600	$8.00	$2.00	$25.00	$2.00	$4.00	$2.00	$12.50	$2.00

Table 22: C&I Electric Chiller Minimum Efficiency Requirements

Equipment Type	Capacity	Constant Speed		Variable Speed		Constant Speed		Variable Speed	
		Incentive Minimum Full Load kW/ton	Qualifying IPLV kW/ton	Qualifying Full Load kW/ton	Incentive Minimum IPLV kW/ton	Incentive Minimum Full Load EER	Qualifying IPLV EER	Qualifying Full Load EER	Incentive Minimum IPLV EER
Air Cooled Chiller	tons < 150					10.3	13.7	9.7	16.12
	tons ≥ 150					10.3	14.0	9.7	16.42
Water Cooled Chiller, Positive Displacement	tons < 75	0.735	0.60	0.78	0.49				
	75 ≤ tons < 150	0.706	0.56	0.75	0.48				
	150 ≤ tons < 300	0.647	0.54	0.68	0.431				
	300 ≤ tons < 600	0.598	0.52	0.625	0.402				
	tons ≥ 600	0.549	0.50	0.585	0.372				
Water Cooled Chiller, Centrifugal	tons < 150	0.598	0.55	0.695	0.431				
	150 ≤ tons < 300	0.598	0.55	0.635	0.392				
	300 ≤ tons < 400	0.549	0.52	0.595	0.382				
	400 ≤ tons < 600	0.549	0.50	0.585	0.372				
	tons ≥ 600	0.549	0.50	0.585	0.372				

Gas Cooling

- For gas chillers, full load efficiencies are determined in accordance with A.H.R.I. 560, however, part load efficiencies are not rated.

Table 23: C&I Gas Absorption Chiller Incentives

Equipment Type	Size Range	Min Efficiency	Incentive
Gas Absorption Chiller	< 100 tons	> 1.1 Full Load COP	$450/ton
	100 to 400 tons		$230/ton
	> 400 tons		$185/ton

Table 24: C&I Regenerative Desiccant Unit Incentives

Equipment Type	Requirement	Incentive
Regenerative Desiccant Unit	Must be matched with core gas or electric cooling equipment.	$1.00/CFM of process air flow

Electric HVAC

Table 25: C&I Unitary Electric HVAC Incentives

- Incentive rate applies to both Existing Buildings and New Construction projects.

Equipment Type	Cooling Capacity (Btu/h)	Tier	Minimum Efficiency			Incentive $/Ton
			SEER	EER	IEER	
Unitary HVAC Split System	< 65,000	1	14.0			$92
		2	16.0			$105
Unitary HVAC Single Package	<65,000	1	14.3			$92
		2	16.0			$103
Unitary HVAC Single Package or Split System	≥ 65,000 and < 135,000	1		11.5	13.0	$73
		2		12.5	14.0	$79
	≥ 135,000 and < 240,000	1		11.5	12.4	$79
		2		12.0	14.0	$89
Central DX AC	≥ 240,000 and < 760,000	1		10.5	11.6	$79
		2		11.0	12.5	$85
	≥ 760,000	1		9.7	11.2	$72
		2		10.0	12.0	$77

Table 26: C&I Air Source Heat Pump Incentives

- Incentive rate applies to both Existing Buildings and New Construction projects.

Equipment Type	Cooling Capacity (Btu/h)	Tier	Minimum Efficiency					Incentive $/ton
			SEER	HSPF	EER	IEER	COP	
Air Source Heat Pump Split System	< 65,000	1	14.3	8.4				$92
		2	15.5	8.5				$100
Air Source Heat Pump Single Package	< 65,000	1	14.3	8.2				$92
		2	15.5	8.5				$100
Air Source Heat Pump Split System	≥ 65,000 and < 135,000	1			11.5	12.2	3.4	$73
		2			12.1	12.8	3.5	$77
	≥ 135,000 and < 240,000	1			11.5	11.6	3.3	$79
		2			11.7	15.0	3.3	$82
	≥ 240,000	1			9.5	10.6	3.2	$79
		2			9.7	12.0	3.2	$82
Air Source Heat Pump Single Package	≥ 65,000 and < 135,000	1			11.5	12.2	3.4	$73
		2			12.1	12.8	3.5	$77
	≥ 135,000 and < 240,000	1			11.5	11.6	3.3	$79
		2			11.7	15.0	3.3	$82
	≥ 240,000	1			9.5	10.6	3.2	$79
		2			9.7	12.0	3.2	$82

Table 27: C&I Water Source Heat Pump Incentives

Equipment Type	Cooling Capacity (Btu/h)	Tier	Minimum Efficiency		Incentive $/Ton	
			EER	COP	Existing Building	New Construction
Water to Air, Water Loop Heat Pump	< 17,000	1	12.4	4.3	$40	$20
		2	14.0	4.8	$45	$23
	≥ 17,000 and < 65,000	1	13.3	4.3	$60	$30
		2	15.0	4.5	$68	$34
	≥ 65,000 and < 135,000	1	13.3	4.3	$80	$40
		2	15.0	4.5	$90	$45

Table 28: C&I Single Packaged Vertical AC and Heat Pump Incentives

Equipment Type	Cooling Capacity (Btu/h)	Tier	Minimum Efficiency		Incentive $/Ton	
			EER	COP	Existing Building	New Construction
Single Packaged Vertical AC - SPVAC	< 65,000	1	10.2		$45	$10
		2	10.7		$47	$12
	≥ 65,000 and < 135,000	1	10.2		$45	$10
		2	10.7		$47	$12
	> 135,000 and < 240,000	1	10.2		$45	$10
		2	10.7		$47	$12
Single Packaged Vertical Heat Pump - SPVHP	< 65,000	1	10.2	3.1	$45	$10
		2	10.7	3.2	$47	$12
	≥ 65,000 and < 135,000	1	10.2	3.1	$45	$10
		2	10.7	3.2	$47	$12
	≥ 135,000 and < 240,000	1	10.2	3.1	$45	$10
		2	10.7	3.2	$47	$12

Table 29: C&I Ground Source Heat Pump Incentives

Equipment Type	Cooling Capacity (Btu/h)	Tier	Minimum Efficiency		Incentive $/Ton	
			EER	COP	Existing Building	New Construction
Ground Source Heat Pump	< 135,000	1	14.4	3.2	$80	$40
		2	18.0	3.6	$100	$50
Groundwater Source Heat Pump	< 135,000	1	18.4	3.7	$80	$40
		2	22.0	3.9	$96	$48

Table 30: C&I Packaged Terminal AC and Heat Pump Incentives

Equipment Type	Cooling Capacity (Btu/hr)	Minimum Efficiency		Incentive $/Ton	
		EER	COP	Existing Building	New Construction
Packaged Terminal AC	< 7,000	12.0		$40/ton (all cooling capacities)	$20/ton (all cooling capacities)
	≥ 7,000	12.0			
	≥ 8,000	11.7			
	≥ 9,000	11.4			
	≥ 10,000	11.1			
	≥ 11,000	10.8			
	≥ 12,000	10.5			
	≥ 13,000	10.2			
	≥ 14,000	9.9			
	≥ 15,000	9.6			
Packaged Terminal Heat Pump	< 7,000	12.0	3.4		
	≥ 7,000	12.0	3.4		
	≥ 8,000	11.7	3.3		
	≥ 9,000	11.4	3.3		
	≥ 10,000	11.1	3.2		
	≥ 11,000	10.8	3.2		
	≥ 12,000	10.5	3.1		
	≥ 13,000	10.2	3.1		
	≥ 14,000	9.9	3.0		
	≥ 15,000	9.6	3.0		

Table 31: C&I Electric HVAC Controls Incentives

- New construction hospitality/institutional buildings with more than 50 units are not eligible for Occupancy Controlled Thermostats for Hospitality/Institutional Facilities incentive.

Equipment Type	Controlled Unit Size	Incentive
Occupancy Controlled Thermostats for Hospitality/Institutional Facilities	Any capacity	$75 per occupancy-controlled thermostat
A/C Economizing Control	≤ 5 tons	$85/control
	> 5 tons	$170/control

Gas Heating

Table 32: C&I Non-Condensing Boiler HVAC Incentives

Equipment Type	Boiler Type	Size (Input Rate)	Minimum Efficiency	Incentive
Gas Boiler, Non-Condensing	Hot Water	< 300 MBtu/h	85% AFUE	$0.95/MBH; Min $400
		> 300 to 1,500 MBtu/h	85% Et	$1.75/MBh
		> 1,500 to 2,500 MBtu/h	85% Et	$1.50/MBh
		> 2500 to 4,000 MBtu/h	85% Ec	$1.30/MBh
	Steam, all except natural draft	< 300 MBtu/h	82% AFUE	$1.40/MBH; Min $400
		> 300 to 1,500 MBtu/h	81% Et	$1.20/MBh
		> 1,500 to 2,500 MBtu/h	81% Et	$1.20/MBh
		> 2,500 to 4,000 MBtu/h	81% Et	$1.00/MBh
	Steam, natural draft	< 300 MBtu/h	82% AFUE	$1.40/MBH; Min $300
		> 300 to 1,500 MBtu/h	79% Et	$1.00/MBh
		> 1500 to 2,500 MBtu/h	79% Et	$0.90/MBh
		> 2,500 to 4,000 MBtu/h	79% Et	$0.70/MBh
	All types	> 4,000 MBtu/h		Treated under Custom Measure Path

Table 33: C&I Condensing Boiler HVAC Incentives

Equipment Type	Boiler Type	Size (Input Rate)	Minimum Efficiency	Incentive
Gas Boiler, Condensing	Hot Water	< 300 MBtu/h	88% AFUE	$1.35/MBH; Min $1000
			93% AFUE	$2.00/MBH ; Min $1,000
		> 300 to 1,500 MBtu/h	88% Et	$2.00/MBh; Min $1000
			91% Et	$2.20/MBh; Min $1000
		> 1,500 to 2,500 MBtu/h	88% Et	$1.85/MBh
			93% Et	$2.20/MBh
		> 2500 to 4,000 MBtu/h	88% Ec	$1.55/MBh
			93% Ec	$2.00/MBh
		> 4,000 MBtu/h		Treated under Custom Measure Path

Table 34: C&I Boiler Economizing Controls Incentives

- Boiler Economizing Controls incentives are limited to Existing Buildings only.

Equipment Type	Controlled Unit Size	Incentive
Boiler Economizing Controls	≤ 800 MBtu/h	$1,200/control
	> 800 to < 1,600 MBtu/h	$1,500/control
	≥1,600 to < 3,000 MBtu/h	$1,800/control
	≥3,000 to < 3,500 MBtu/h	$2,100/control
	≥3,500 to < 4,000 MBtu/h	$2,400/control
	> 4,000 MBtu/h	$2,700/control

Table 35: C&I Gas Furnace and Infrared Heater Incentives

Equipment Type	Capacity	Requirement	Minimum Efficiency	Incentive
Gas Furnace	All Sizes	ENERGY STAR® Qualified, 2.0% Fan Efficiency	≥ 95% AFUE	$400
			≥ 97% AFUE	$500
Gas Infrared Heater	≤ 100 MBtu/h	Low intensity infrared heater with reflectors. For indoor use only.	n/a	$500
	> 100 MBtu/h			$300

Table 36: C&I Domestic Hot Water Pipe Wrap Insulation Incentives

- For Existing Buildings, pipe insulation thickness must comply with required thickness listed in ASHRAE 90.1-2016 Table 6.8.3-1.
- For New Construction, pipe insulation thickness must exceed required thickness listed in ASHRAE 90.1-2016 Table 6.8.3-1.

Equipment Type	Pipe Diameter	Incentive
Domestic Hot Water Pipe Wrap Insulation	≤ 0.5 inch diameter piping	$1/linear foot
	> 0.5 inch diameter piping	$2/linear foot

Gas Water Heating

Table 37: C&I Gas Water Heating Incentives

Equipment Type	Water Heater Type	Size (Input Rate)	Min Efficiency	Incentive
Gas Water Heaters	Gas-fired, Storage	≤ 75 MBtu/h *(consumer)*	≥ 0.64 UEF	$1.75/ MBtu/h
			≥ 0.85 UEF	$3.50/ MBtu/h
		>75 MBtu/h and ≤ 105 MBtu/h *(residential duty commercial)*	≥ 82% Et or ≥ 0.64 UEF	$1.75/ MBtu/h
			≥ 90% Et or ≥ 0.85 UEF	$3.50/ MBtu/h
		> 105 MBtu/h *(commercial)*	≥ 82% Et	$1.75/ MBtu/h
			≥ 92% Et	$3.50/ MBtu/h
	Gas-fired, instant (tankless)	< 200 MBtu/h *(consumer)*	≥ 90% Et or ≥ 0.90 UEF	$300/unit
		≥ 200 MBtu/h *(commercial)*	≥ 90% Et	$300/unit
	Gas-fired, Water Booster Heater	≤ 100 MBtu/h	n/a	$35/ MBtu/h
		> 100 MBtu/h	n/a	$17/ MBtu/h

Table 38: C&I Low-Flow Fixture Incentives

Equipment Type	Pipe Diameter	Incentive
Low Flow Showerhead	Tier 1 (2 GPM – EPA Water Sense)	$10/showerhead
	Tier 2 (1.5 GPM or Less)	$15/showerhead
Low Flow Faucet Aerator	Tier 1 (1.5 GPM – EPA Water Sense)	$2/aerator
	Tier 2 (1 GPM or Less)	$4/aerator

Variable Frequency Drives

- Motor Size (HP) Controlled per VFD is the cumulative motor HP controlled by each VFD.
- Controlled Motor HP less than the listed range of eligible values are ineligible for incentives.
- Controlled Motor HP more than the listed eligible values should use the C&I Custom program.
    - For all VFD measure except air compressors, the maximum controlled threshold is 50HP. VFDs controlling more than 50HP, except related to air compressors, will be reviewed through the custom measure path.
    - For new air compressors with VFDs, prescriptive incentives will be provided for units up to 200HP. VFDs controlling air compressor motors exceeding 200HP will be reviewed through the custom measure path.
- If the controlled HP falls in between the HP listed on the VFD incentive table, the incentive is based on the lower controlled HP listed.

Table 39: C&I VFD Incentives

Equipment Type	Motor Size (HP) Controlled per VFD	Incentive
Variable Frequency Drives	0.5	$50
	1	$75
	2	$100
	3	$200
	4	$300
	5	$900
	7.5	$1000
	10	$1,100
	15	$1,200
	20	$1,300
	25	$1,400
	30	$1,500
	40	$2,500
	50	$3,000
	60	$3,500
	75	$4,000
	100	$5,000
	200	$7,000

Table 40: VFD Eligible Size Range of Controlled Motor

Equipment Type	Eligible Size Range of Controlled Motor	Eligibility Requirements
VFD on VAV HVAC System	5 HP ≤ 50 HP	Must be installing VFD on an existing VAV system as an add-on measure. Replacement of an existing VFD on VAV system and installations on VAV systems in new construction are not eligible.
VFD on Constant Volume HVAC System	0.5 HP ≤ 50 HP	Must be installing VFD on existing HVAC supply, exhaust or return air fans only. Throttling devices, such as inlet vanes or bypass dampers and throttling valves must be removed or permanently disabled.
VFD on Cooling Tower	10 HP ≤ 50 HP	Must be installing VFD on existing single speed motors only. Replacement of two speed motor with single speed/VFD motor, replacement of existing VFD and new construction do not qualify.
VFD on Chilled Water Pump	20 HP ≤ 50 HP	Must be installing VFD on centrifugal chilled water pump motors for HVAC systems only.
VFD on Air Compressor	25 HP ≤ 200 HP	Must be installing VFD on new air or water cooled, single or double stage, oil lubricated or oil free twin rotor screw air compressors outfitted with VFDs (providing compressed air for typical plant air use). Replacement of VFD on an existing air compressor that had VFD control is not eligible for incentives. Only one VFD controlled air compressor will be eligible for an incentive for each compressed air system.
VFD on Boiler Feed Water Pump	5 HP ≤ 50 HP	Must be installing VFD on existing single-speed motor only. Replacement of two-speed motor with single speed/VFD motor or replacement of existing VFD or new construction do not qualify. VFD must be controlled by an automatic signal in response to modulating air/water flows.
VFD on Boiler Fan Motor	5 HP ≤ 50 HP	
VFD on Kitchen Hood	0.5 HP ≤ 50 HP	Must be installing VFD on existing single-speed motor only. Replacement of two-speed motor with single speed/VFD motor or replacement of existing VFD or new construction do not qualify.

Performance Lighting

- Performance Lighting incentives are available for eligible indoor light fixtures and outdoor fixtures (whose electricity usage is billed through the applicant's meter) in new construction and major gut renovations of existing buildings. Major gut renovations of areas within existing buildings are also eligible only if existing lighting is completely removed.
- Proposed lighting design must demonstrate lighting power density ("LPD") lower than specified by ASHRAE 90.1-2016 for all relevant eligible spaces, except as specifically exempted in Section 9.1.1 and 9.2.2.3.
    - Note: Horticultural lighting incentives are available, see C&I Prescriptive Lighting.
- Proposed lighting design must predominantly consist of LED fixtures and lamps qualified by DesignLights Consortium® or ENERGY STAR®.
- As indicated elsewhere in this Compliance Filing, Performance Lighting, Prescriptive Lighting, and Lighting Controls are not eligible for Enhanced Incentives.

Table 41: C&I Performance-Based Lighting Incentives

Equipment Type	Incentive Cap	Incentive Caps
Performance-Based Lighting New Construction and Major Gut Renovation of Existing Buildings	Design Wattage Cap	$1/Watt over the LPD baseline per qualified area

Prescriptive Lighting

- For incentive eligibility, LED equipment must be listed on the current ENERGY STAR® or DesignLights Consortium® qualified products list.
- Incentives will not be provided for:
  - LEDs replacing existing LED lamps/fixtures;
  - Installation of otherwise eligible screw-in/plug-in lighting measures that are (a) not hard-wired or not permanent (example - refrigerator, oven, floor/desk lamps) or (b) retail display lighting.
- LED categories and products qualified by ENERGY STAR or Design Lights Consortium not identified below as prescriptive will be considered for incentives through the Custom measure path.
- **For DLC® Indoor Horticultural LED Fixtures**:
  - Incentive is calculated based on the installed LED fixture quantity.
  - Incentives are available for both replacement of existing fixtures and installation of new in either an existing building or new construction.
- **For all other ENERGY STAR® and DLC® LED categories** other than Indoor Horticultural:
  - Incentive is calculated based on one-for-one replacement of existing fixtures.
  - Incentives are available for replacement of fixtures in existing buildings only.
- As indicated elsewhere in this Compliance Filing, neither Performance Lighting, Prescriptive Lighting, nor Lighting Controls are eligible for Enhanced Incentives.

Table 42: C&I ENERGY STAR® Certified LED Bulb Incentives

Equipment Type	Fixture Category	Incentive
ENERGY STAR® Certified LED Bulbs Qualified Products List[30]	G30, G40, PAR30, PAR40, R30, BR30, BR40	$3/lamp
	R14, R16, G16.5, G25, PAR16, PAR20, R20, BR20	$2/lamp
	All other ENERGY STAR® bulb types	$1/lamp

[30] https://www.energystar.gov/productfinder/product/certified-light-bulbs/results

Table 43: C&I ENERGYSTAR® Certified LED Fixture Incentives

Equipment Type	Fixture Category	Incentive
ENERGY STAR® Certified LED Fixtures Qualified Products List[31]	LED Bath Vanity	$5/fixture
	LED Ceiling Mount	$5/fixture
	LED Close to Ceiling Mount	$5/fixture
	LED Cove Mount	$5/fixture
	LED Decorative Pendant	$5/fixture
	LED Downlight Pendant	$5/fixture
	LED Downlight Solid State Retrofit	$5/fixture
	LED Downlight Surface Mount	$5/fixture
	LED ENERGY STAR Outdoor Post-Mount	$5/fixture
	LED ENERGY STAR Security	$5/fixture
	LED ENERGY STAR Wall Sconces	$5/fixture
	LED ENERGY STAR: Other	$5/fixture
	LED Outdoor (Various Types)	$5/fixture
	LED Pendant	$5/fixture
	LED Porch (wall mounted)	$5/fixture
	LED Post	$5/fixture
	LED Recessed Downlight	$5/fixture
	LED Torchiere	$5/fixture
	LED Wrapped Lens	$5/fixture
	LED Linear Strip	$10/fixture
	LED Under Cabinet	$10/fixture
	LED Accent Light Line Voltage	$15/fixture

[31] https://www.energystar.gov/productfinder/product/certified-light-fixtures/results

Table 44: C&I DLC® Certified LED Exterior LED Fixtures

Equipment Type	Fixture Category	Incentive
DesignLights Consortium® Qualified Exterior LED Fixtures *All Primary Use Categories to Right* Qualified Products List[32]	LED Architectural Flood and Spot Luminaries	$50/fixture
	LED Bollard Fixtures	$50/fixture
	LED Fuel Pump Canopy	$100/fixture; new and retrofit
	LED Landscape/Accent Flood and Spot Luminaires	$25/fixture
	LED Outdoor Pole/Arm-Mounted Area and Roadway Luminaires	$100/fixture; new and retrofit
	LED Large Outdoor Pole/Arm-Mounted Area and Roadway Retrofit	$150/fixture
	LED Outdoor Pole/Arm-Mounted Area and Roadway Luminaires	$100/fixture; new and retrofit
	LED Outdoor Pole/Arm-Mounted Decorative Luminaires	$50/fixture; new and retrofit
	LED Outdoor Wall-Mounted Area Luminaires	$50/fixture
	LED Parking Garage Luminaires	$100/fixture; new and retrofit

[32] https://www.designlights.org/

Table 45: C&I DLC® Certified LED Replacement Lamps

Equipment Type	Fixture Category	Incentive
DesignLights Consortium® Qualified LED Replacement Lamps *All Primary Use Categories to Right* Qualified Products List[33]	LED Four-Pin Replacement Lamps for CFLs	$5/lamp
	LED Linear Replacement Lamps	2' length: $3/lamp 3', 4' length and U-Bend: $5/lamp 8' length: $10/lamp
	LED Mogul (E39) Screw-Base Replacements for HID Lamps	Incentive based on new LED lamp wattage ≤125W: $50/lamp >125W to ≤250W: $75/lamp >250W: $150/lamp

[33] https://www.designlights.org/

Table 46: C&I DLC® Certified Interior LED Fixtures

Equipment Type	Fixture Category	Incentive
DesignLights Consortium® Qualified Interior LED Fixtures *All Primary Use Categories to Right* Qualified Products List[34]	LED Display Case Lighting	$15/fixture
	LED High-bay Aisle Lighting *Incentive based on new LED fixture wattage*	≤125W: $50/fixture >125W to ≤250W: $75/fixture >250W: $150/fixture
	LED high-bay and Low-bay fixtures for C&I Buildings *Incentive based on new LED fixture wattage*	≤125W: $50/fixture >125W to ≤250W: $75/fixture >250W: $150/fixture
	LED Linear Ambient Luminaires (Indirect, Indirect/Direct, Direct/Indirect, Direct)	2' length: $15/fixture 3' length: $20/fixture 4' length: $25/fixture 6' length: $30/fixture 8' length: $40/fixture
	Retrofit Kit for LED Linear Ambient Luminaires (Indirect, Indirect/Direct, Direct/Indirect, Direct)	2' length: $15/fixture 4' length: $15/fixture 8' length: $25/fixture
	LED Linear Panels (Luminaires for Ambient Lighting of Interior Commercial Spaces)	1x4 and 2x2: $15/fixture; new and retrofit 2x4: $25/fixture; new and retrofit
	LED Refrigerated Case Lighting	4' length: $15/fixture 5' length: $20/fixture 6' length: $25/fixture
	LED Stairwell and Passageway Luminaires	$45/fixture
	LED Track or Mono-point Directional Lighting Fixtures	$30/fixture
	LED Wall-Wash Luminaires	$55/fixture

[34] https://www.designlights.org/

Table 47: C&I DLC® Certified Indoor Horticultural LED Fixtures

Equipment Type	Facility Type	New LED Fixture Wattage	Incentive
DesignLights Consortium® Qualified Horticultural LED Fixtures Qualified Products List[35]	Indoor Horticultural Facilities Operating ≥ 3000 hours/year	≥ 500 Watts	$250/fixture
		< 500 watts	$150/fixture
	Indoor Horticultural Facilities Operating < 3000 hours/year	≥ 500 Watts	$200/fixture
		< 500 watts	$50/fixture

Lighting Controls

- Occupancy sensors: Turning fixtures off in Existing facilities only (e.g. ceiling)
- Daylight Dimming: New construction projects not eligible unless exceeding code requirement under ASHRAE 90.1-2016
- High-Low Controls: New construction projects not eligible unless exceeding code requirement under ASHRAE 90.1-2016
- As indicated elsewhere in this Compliance Filing, neither Performance Lighting, Prescriptive Lighting, nor Lighting Controls are eligible for Enhanced Incentives.

Table 48: C&I Lighting Controls Incentives

Equipment Type	Incentive
Occupancy Sensor Wall Mounted	$20 per control
Occupancy Sensor Remote Mounted	$35 per control
Day Lighting Dimmers	$45 per fixture controlled
High-Low Controls	$35 per fixture controlled
Advanced Lighting Control Systems (ALCS)	Incentives will be provided through the Custom program. To be eligible, ALCS must be listed on the current Design Lights Consortium qualified products list.

[35] https://www.designlights.org/

Refrigeration System Upgrades

Table 49: C&I Refrigerator/Freezer Equipment Incentives

Equipment Type	Requirement	Incentive
Fractional (< 1 HP) Electronic Commutated (EC) Motors	Must be replacement of existing shaded-pole motor in refrigerated/freezer cases. New construction projects not eligible.	$40/EC Motor
Energy-Efficient Doors for Open Refrigerated Doors/Covers		$100/door
Aluminum Night Curtains for Open Refrigerated Cases		$3.50/linear foot

Table 50: C&I Refrigeration Controls Incentives

- Door Heater Control, Electric Defrost Control, Floating Head Pressure Controls and Floating Suction Pressure Controls are not eligible for new construction projects.
- Floating Head Pressure controls requirements:
  - Commercial facilities: Upgrade of Commercial Air-Cooled Refrigeration System or Evap-Cooled Refrigeration Systems only.
  - Refrigerated warehouses: Upgrade of Process Evap-Cooled Refrigeration System only.
- Floating Suction Pressure Controls requirements:
  - Commercial facilities: Upgrade of Commercial Refrigeration System only.
  - Refrigerated warehouses: Upgrade of Process Refrigeration System only.

Equipment Type	Incentive
Door Heater Control	$50/control
Electric Defrost Control	$50/control
Novelty Cooler Shutoff	$50/control
Evaporator Fan Control	$75/control
Floating Head Pressure Controls	$75/ton
Floating Suction Pressure Controls	$50/ton

Food Service Equipment

Table 51: C&I Dishwasher Incentives

- Equipment must be qualified by the current version of ENERGY STAR® or CEE.

Equipment Type	Description	Incentive
Commercial Dishwasher	Under Counter	$400 per unit
	Door Type	$700 per unit
	Single Tank Conveyor	$1,000 per unit
	Multiple Tank Conveyor	$1,500 per unit

Table 52: C&I Cooking Equipment Incentives

- Equipment must be qualified by the current version of ENERGY STAR, CEE or ASTM criteria defined in the table at the end of this section.
- Commercial Fryers: Multiple vat configurations are paid per qualifying vat.

Equipment Type	Description	Incentive
Commercial Combination Oven/Steamer	Electric	$1,000 per oven
	Gas	$750 per oven
Commercial Convection Oven	Electric	$350 per oven
	Gas	$500 per oven
Commercial Rack Oven	Single oven (Gas)	$1,000 per single oven
	Double oven (Gas)	$2,000 per double oven
Commercial Fryer	Electric	$200 per vat
	Gas	$749 per vat
Commercial Large Vat Fryer	Electric	$200 per vat
	Gas	$500 per vat
Commercial Griddle	Electric	$300 per griddle
	Gas	$125 per griddle
Commercial Steam Cooker	Electric	$1,250 per steamer
	Gas	$2,000 per steamer

Table 53: C&I Insulated Holding Cabinet Incentives

- Must meet CEE Tier II or current ENERGY STAR specification.
- Does not include cook and hold equipment.
- All measures must be electric hot food holding cabinets that are fully insulated and have solid doors.

Equipment Type	Size	Incentive
Insulated Holding Cabinets	Full Size	$300 per unit
	¾ Size	$250 per unit
	½ Size	$200 per unit

Table 54: C&I ENERGY STAR® Refrigerator and Freezer Incentives

- The refrigeration system must be built-in (packaged).
- Cases with remote refrigeration systems do not qualify.
- Must meet ENERGY STAR Version 4.0 specification.

Equipment Type	Refrigerator/Freezer Internal Volume	Incentive
ENERGY STAR® Commercial Glass Door Refrigerator	< 15 ft^3	$75 per unit
	≥ 15 to < 30 ft^3	$100 per unit
	≥ 30 to < 50 ft^3	$125 per unit
	≥ 50 ft^3	$150 per unit
ENERGY STAR® Commercial Solid Door Refrigerator	< 15 ft^3	$50 per unit
	≥ 15 to < 30 ft^3	$75 per unit
	≥ 30 to < 50 ft^3	$125 per unit
	≥ 50 ft^3	$200 per unit
ENERGY STAR® Commercial Glass Door Freezer	< 15 ft^3	$200 per unit
	≥ 15 to < 30 ft^3	$250 per unit
	≥ 30 to < 50 ft^3	$500 per unit
	≥ 50 ft^3	$1,000 per unit
ENERGY STAR® Commercial Solid Door Freezer	< 15 ft^3	$100 per unit
	≥ 15 to < 30 ft^3	$150 per unit
	≥ 30 to < 50 ft^3	$300 per unit
	≥ 50 ft^3	$600 per unit

Table 55: C&I ENERGY STAR® Ice Machine Incentives

- Ice machines must be tested in accordance with the Air Conditioning and Refrigeration Institute (ARI) Standard 810.
- Includes machines generating ice cubes that are 60 grams (2 oz.) or lighter. It also includes flaked, crushed and fragmented ice makers.
- Only air-cooled machines (self-contained, ice making heads, or remote condensing) qualify.
- The entire ARI tested ice making system must be purchased.
- Remote machines must be purchased with qualifying remote condenser or remote condenser/compressor unit.
- The efficiency specifications for the two qualifying tiers are equivalent to ENERGY STAR® or Super-Efficient. ENERGY STAR® ice machines must meet ENERGY STAR® Version 3.0 specification.

Equipment Type	Ice Harvest Rate	Incentive
ENERGY STAR® Commercial Ice Machine	101–200 lbs/day	$50 per unit
	201–300 lbs/day	$50 per unit
	301–400 lbs/day	$75 per unit
	401–500 lbs/day	$75 per unit
	501–1000 lbs/day	$125 per unit
	1001–1500 lbs/day	$200 per unit
	Greater than 1500 lbs/day	$250 per unit
Super-Efficient Ice Machine	101–200 lbs/day	$100 per unit
	201–300 lbs/day	$100 per unit
	301–400 lbs/day	$150 per unit
	401–500 lbs/day	$150 per unit
	501–1000 lbs/day	$250 per unit
	1001–1500 lbs/day	$400 per unit
	Greater than 1500 lbs/day	$500 per unit

Table 56: C&I ASTM Cooking Equipment Criteria

Equipment Type	Fuel	ASTM Cooking Equipment Criteria
Commercial Combination Oven/Steamer	Electric	• Must meet the idle energy rate requirements in the Electric Combination Oven/Steamer Table, utilizing American Society for Testing and Materials (ASTM) F2861. • Must have a cooking energy efficiency of 55 percent or greater in steam mode and 76 percent cooking energy efficiency or greater in convection mode, utilizing (ASTM) F2861. • Combination oven/steamer pan capacity based on the maximum capacity of full-size 2 1/2-inch deep hotel pans. This must be consistent with the number of pans used to meet the energy-efficiency qualifications per ASTM F2861.
	Gas	• Must have a cooking energy efficiency of 41 percent or greater in steam mode and 56 percent or greater in convection mode, utilizing ASTM F2861. • Must meet the idle energy rate requirements in the Gas Commercial Combination Oven/Steamer Table, utilizing ASTM F2861. • Combination oven/steamer pan capacity on based on the maximum capacity of full-size 2 1/2-inch deep hotel pans. This must be consistent with the number of pans used to meet the energy-efficiency qualifications per ASTM F2861.
Commercial Convection Oven	Electric	• Must have a tested heavy load (potato) cooking energy efficiency of 71 percent or more, utilizing ASTM F1496. • Full-size electric ovens must have a tested idle energy rate of 1.6 kW or less, utilizing ASTM F1496. • Half-size electric ovens must have a tested idle energy rate of 1.0 kW or less, utilizing ASTM F1496.
	Gas	Must have a tested heavy load (potato) cooking energy efficiency of 46 percent or greater and an idle energy rate of 12,000 Btu/h or less, utilizing ASTM F1496.
Commercial Rack Oven	Gas	• Single rack ovens must have a tested baking energy efficiency of 48 percent or greater and a total energy idle rate of 25,000 Btu/h or less, utilizing ASTM F2093. • Double rack ovens must have a tested baking energy efficiency of 52 percent or greater and a total energy idle rate of 30,000 Btu/h or less, utilizing ASTM F2093.
Commercial Fryer	Electric	Must have a tested heavy load cooking energy efficiency of 83 percent or greater and an idle energy rate of 800 W or less, utilizing ASTM F1361.
	Gas	Must meet a tested heavy load cooking energy efficiency of 50 percent or greater and an idle energy rate of 9,000 Btu/h or less, utilizing ASTM F1361.
Commercial Large Vat Fryer	Electric	Must have a tested heavy load (French fry) cooking energy efficiency of 80 percent or greater and an idle energy rate of 1,100 W or less, utilizing ASTM F2144.
	Gas	Must have a tested heavy load (French fry) cooking energy efficiency of 50 percent or greater and an idle energy rate of 12,000 Btu/h or less, utilizing ASTM F2144.
Commercial Griddle	Electric	Must have a tested heavy load cooking energy efficiency of 70 percent or greater and an idle energy rate of 355 watts per square foot of cooking surface or less, utilizing ASTM F1275.
	Gas	Must have a tested heavy load cooking energy efficiency of 38 percent or greater and an idle energy rate of 2,650 Btu/h per square foot of cooking surface or less, utilizing ASTM F1275.
Commercial Steam Cooker	Electric	Must have a tested heavy load (potato) cooking energy efficiency of 50 percent or greater, utilizing ASTM F1484.
	Gas	Must have a tested heavy load (potato) cooking energy efficiency of 38 percent or greater, utilizing ASTM F1484.

Note: The incentives identified above in this Appendix B may be reduced with the approval of the Division of Clean Energy.

Appendix C: Distributed Energy Resources Incentives and General Rules

Extension Policies

Many programs include deadlines for submittal of information. For example, some programs require the submittal of a final application within six (6) months or one year from the date of the letter approving the initial application. NJCEP provides for extensions of deadlines provided certain conditions are met. Program Managers in general are authorized to approve first and, in some cases, second, extensions. Additional standards/guidelines for approving extensions and/or reinstatements are set out in the Compliance Filings and in the Guidelines established for each program. The PA, with the approval of Board Staff, may approve up to two extensions, each of a length set by the PA with the approval of Board Staff, beyond the extensions the Program Managers are authorized to approve.

Combined Heat and Power – Fuel Cell (CHP-FC) Incentives

C&I / DER Entity Incentive Caps

See Appendix B, Commercial and Industrial Incentives and General Rules.

Total Cost Incentive Cap

See Appendix B, Commercial and Industrial Incentives and General Rules.

CHP-FC Incentive Levels & Schedule

Table 57: CHP-FC Technology and Incentive Levels

Eligible Technology	Size (Installed Rated Capacity)	Incentive ($/Watt) [5]	% of Total Cost Cap per project	$ Cap per project
CHPs powered by non-renewable or renewable fuel source, or a combination[4]: • Gas Internal Combustion Engine • Gas Combustion Turbine • Microturbine ≥ 60% FCs	≤500 kW[1]	$2.00	30-40%[2]	$2 million
	>500 kW – 1 MW[1]	$1.00		
	>1 MW – 3 MW[1]	$0.55	30%	$3 million
	>3 MW[1]	$0.35		
≥ 40% FCs	All of the above[1]	Applicable amount above	30%	$1 million
WHPs[3] Powered by non-renewable fuel source. Heat recovery or other mechanical recovery from existing equipment utilizing new electric generation equipment (e.g. steam turbine)	≤1 MW[1]	$1.00	30%	$2 million
	>1 MW[1]	$0.50	30%	$3 million

1. Incentives are tiered, which means the incentive levels vary based upon the installed rated capacity, as listed in the chart above. For example, a 4 MW CHP system would receive $2.00/watt for the first 500 kW, $1.00/watt for the second 500 kW, $0.55/watt for the next 2 MW and $0.35/watt for the last 1 MW (up to the caps listed).
2. The maximum incentive will be limited to 30% of total project. This cap will be increased to 40% where the recovered heat is used in a cooling application (e.g. absorption chiller) at the facility at which the CHP-FC system is located.

3. Projects installing CHP with WHP will be eligible for incentives shown above, not to exceed the lesser of percent per project cap or dollars per project cap of the CHP. Minimum efficiency will be calculated based on annual total electricity generated, utilized waste heat at the host site (i.e. not lost/rejected), and energy input.
4. Systems fueled by a Class 1 renewable fuel source are eligible for a 30% incentive bonus (additional to the incentives calculated in accordance with the table immediately above, but still subject to the project Cap in that table). If the fuel is mixed, the bonus will be prorated accordingly. For example, if the mix is 60/40 (60% being a Class 1 renewable), the bonus will be 18%. This bonus will be included in the final partial payment, based on system performance and fuel mix consumption data.
5. All CHP-FC systems located at Critical Facility and incorporating blackstart/islanding technology are eligible for a 25% incentive bonus (additional to the incentives calculated in accordance with the table immediately above, but still subject to the project Cap in that table). For this Program, a Critical Facility is any:
    a. Public facility, including, without limitation, any federal, state, county, or municipal facility, or
    b. Non-profit and/or private for-profit facility, including, without limitation, any hospital, water/wastewater treatment facility, school, multifamily building, or similar facility that:
        i. Is determined to be either Tier 1 or critical infrastructure by the New Jersey State Office of Emergency Management or Office of Homeland Security and Preparedness, or
        ii. Could serve as a Shelter during a power outage. For this Program, a Shelter is a facility able to provide food, sleeping arrangements, and other amenities to its residents and the community.

    For the avoidance of doubt, any public facility is a Critical Facility.

Table 58: CHP-FC Incentive Payment Schedule

1st - Purchase	2nd - Installation	3rd - Acceptance of post-installation data
30%	50%	20%

1. Projects will receive program incentives in three partial payments. The first incentive will be paid upon proof of purchase of equipment. The second incentive will be paid upon project installation and operation, including successful inspection. The third incentive will be paid upon acceptance and confirmation that the project is achieving the required performance thresholds based on twelve (12) months of continuous operating data submitted within eighteen (18) months of installation, with the foregoing deadline being subject to being extended for six (6) additional months by the Program Manager upon the request of the applicant submitted prior to the expiration of the deadline and for good cause shown.
    a. If, due to impacts of COVID-19, the applicant is unable to provide the requisite twelve (12) months of representative data to demonstrate the project is achieving

the required performance thresholds, the Program Manager is authorized to work with the applicant to develop and accept other reasonable methods for estimating or demonstrating whether or not the performance thresholds have been met.

2. Regarding the third incentive, if all other required performance thresholds are achieved:
    a. And the total annual net kWh generated is ≥80% of that specified in the Program-approved application, the full third incentive is earned.
    b. But the total annual net kWh generated is ≥50% but <80%, of that specified in the Program-approved application, the amount of the third incentive earned is reduced proportionately by the ratio of actual total annual net kWh generated to the approved application total annual net kWh generated.
    c. But the total annual net kWh generated is <50% of that specified in the Program-approved application, no third incentive is earned.

Appendix D: Multifamily Decision Tree

Figure 1: Multifamily Decision Tree

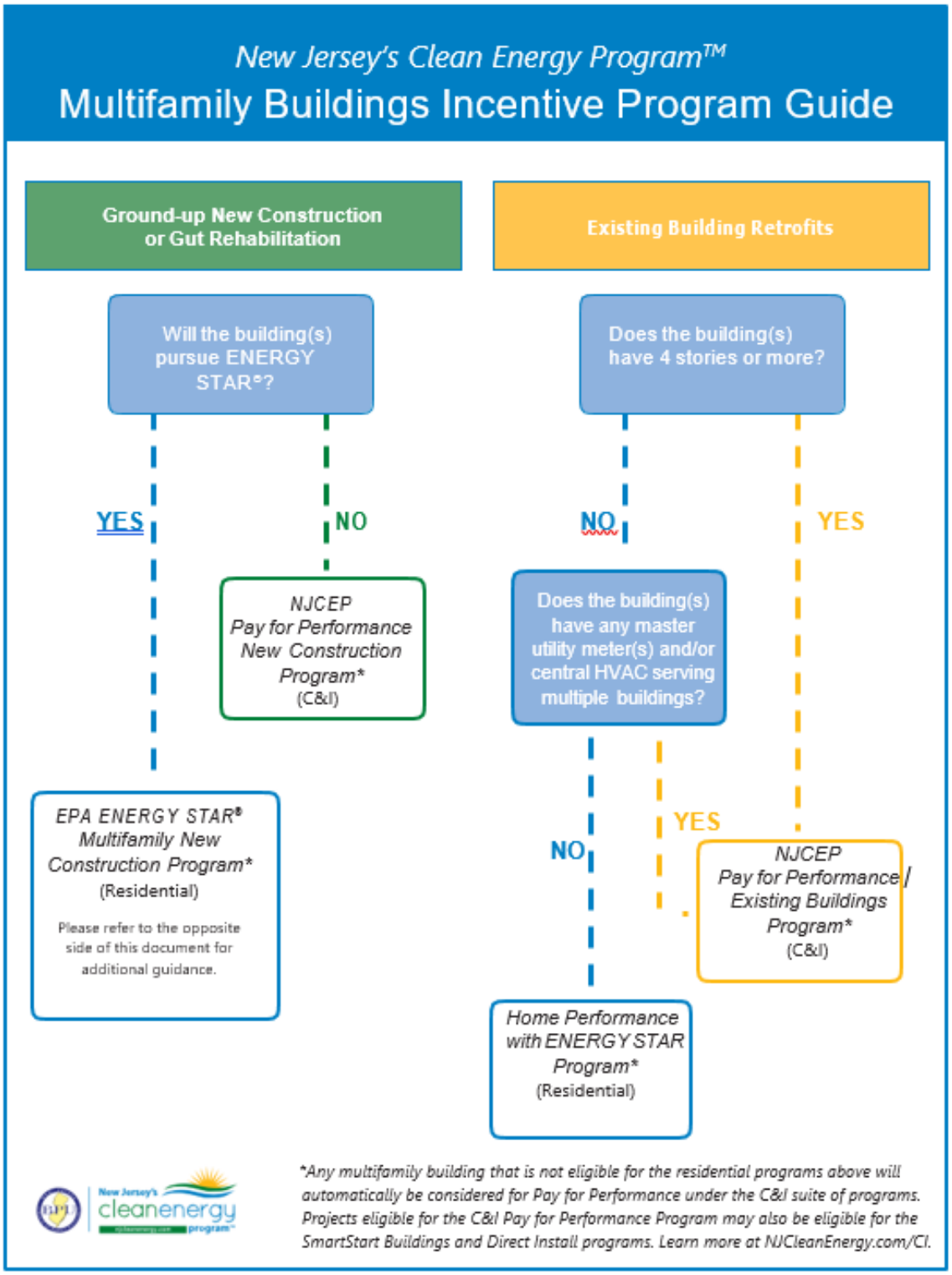
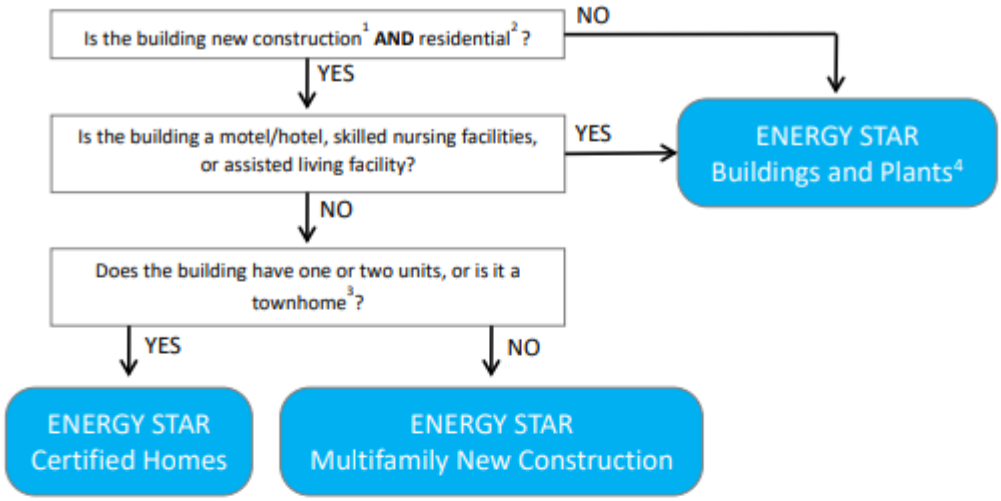


Figure 2 ENERGY STAR Multifamily Guidelines Version 2.1

EPA ENERGY STAR Multifamily New Construction Program Decision Tree, Version 2.1



NOTES:

1. New construction can include significant gut rehabilitations if the building is able to meet all the program requirements.
2. The primary use of the building must be for a residential purpose. In a mixed-use building, the dwelling units and common space combined must exceed 50% of the building's square footage. Parking garage square footage is excluded from this calculation. Common space includes any spaces in the building that serve a function in support of the residential part of the building, that is not part of a dwelling or sleeping unit. This includes spaces used by residents, such as corridors, stairs, lobbies, laundry rooms, exercise rooms, residential recreation rooms, and dining halls, as well as offices and other spaces used by building management, administration or maintenance in support of the residents.
3. Townhomes may choose to use the Multifamily New Construction Checklists as well, but they must use the ERI Path and Certified Homes Reference Design. A townhome is defined as a single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.
4. As of September 16, 2014, multifamily buildings, with at least 1 year of actual, whole building energy use data are eligible to earn the ENERGY STAR using EPA's Portfolio Manager. Portfolio Manager compares a multifamily building's measured performance against a database of similar buildings to generate a 1-100 score. Buildings that score 75 or above earn the ENERGY STAR. For more information on how multifamily buildings can earn the ENERGY STAR with Portfolio Manager please visit the eligibility criteria for the 1-100 ENERGY STAR score page.

   New construction commercial facilities such as motels/hotels, nursing homes, and assisted-living facilities do not qualify under the Multifamily New Construction program, however, they may be eligible to earn the ENERGY STAR through the EPA's commercial and industrial programs. To learn more about how these and other existing commercial buildings can earn ENERGY STAR certification, please visit the Buildings and Plants page. To learn more about the new construction program for commercial buildings visit www.energystar.gov/DesignToEarn.

February 2020

Appendix E: Program Budgets

TRC FY21 - 9 Month Budget		*FY21 Cost Category Budgets*					
Program/Budget Line	*Total Budget*	*Administration*	*Sales, Marketing, Website*	*Training*	*Rebates, Grants and Other Direct Incentives*	*Rebate Processing and QA*	*Evaluation*
Total TRC	**$279,371,662**	**$11,131,680**	**$3,721,829**	**$472,000**	**$253,585,821**	**$10,460,332**	**$0**
EE Programs	**$250,621,397**	**$9,850,227**	**$391,567**	**$443,500**	**$230,875,119**	**$9,060,984**	**$0**
Res EE Programs	***$67,071,319***	***$4,128,865***	***$130,523***	***$315,000***	***$56,313,927***	***$6,183,004***	***$0***
Existing Homes	$30,324,379	$2,187,463	$65,261	$301,500	$25,703,953	$2,066,202	$0
RNC	$11,156,413	$1,180,984	$32,631	$13,500	$9,284,865	$644,433	$0
EE Products	$25,590,527	$760,418	$32,631	$0	$21,325,109	$3,472,369	$0
C&I EE Programs	***$183,550,078***	***$5,721,362***	***$261,044***	***$128,500***	***$174,561,192***	***$2,877,980***	***$0***
C&I Buildings	$149,311,965	$4,296,689	$195,782	$103,500	$142,290,891	$2,425,103	$0
LGEA	$3,731,673	$682,542	$32,631	$12,500	$2,693,895	$310,105	$0
DI	$30,506,440	$742,131	$32,631	$12,500	$29,576,406	$142,772	$0
Distributed Energy Resources	**$23,385,265**	**$493,774**	**$32,631**	**$12,500**	**$22,710,702**	**$135,658**	**$0**
CHP - Fuel Cell	$23,385,265	$493,774	$32,631	$12,500	$22,710,702	$135,658	$0
RE Programs	**$2,100,000**	**$787,679**	**$32,631**	**$16,000**	**$0**	**$1,263,690**	**$0**
SREC Registration	$2,100,000	$787,679	$32,631	$16,000	$0	$1,263,690	$0
Planning and Administration	**$3,265,000**	**$0**	**$3,265,000**	**$0**	**$0**	**$0**	**$0**
Outreach and Education	***$3,265,000***	***$0***	***$3,265,000***	***$0***	***$0***	***$0***	***$0***
Outreach, Website, Other	$3,265,000	$0	$3,265,000	$0	$0	$0	$0

Appendix F: Program Goals and Performance Metrics

NJCEP FY21 (Oct - Jun) Energy Savings Goals: Portfolio Summary					
Program/Budget Line	***Annual MWH Savings***	***Lifetime MWH Savings***	***MW Savings***	***Annual MMBTU Savings***	***Lifetime MMBTU Savings***
Total TRC	794,870	11,875,350	89.0	630,748	10,960,169
EE Programs	792,221	11,828,988	88.6	622,848	10,821,924
Res EE Programs	604,205	8,854,270	52.8	434,572	7,343,844
Residential Existing Homes	4,060	64,836	2.4	195,019	3,907,886
HPwES	1,321	23,834	0.4	56,400	1,228,393
HVAC	2,738	41,002	2.0	138,619	2,679,493
RNC	4,472	89,447	1.5	52,824	1,056,464
EE Products	595,673	8,699,988	48.9	186,730	2,379,494
C&I EE Programs	188,015	2,974,718	35.8	188,276	3,478,080
C&I Buildings	160,747	2,566,521	30.1	117,412	2,263,473
C&I Retrofit	122,717	1,930,337	24.2	21,384	395,243
C&I NC	1,621	32,373	0.3	2,167	41,401
P4P EB	12,287	193,880	2.6	38,247	837,606
P4P NC	4,006	64,012	0.2	6,840	113,750
LEUP	17,545	305,462	2.1	44,247	796,412
Customer Tailored	2,572	40,456	0.7	4,526	79,060
LGEA	0	0	0.0	0	0
DI	27,268	408,197	5.8	70,864	1,214,608
Distributed Energy Resources	2,650	46,362	0.4	7,900	138,244

Appendix G: Cost-Benefit Analysis

Cost-effectiveness analysis compares the costs and benefits of energy efficiency and renewable energy measures, programs and portfolios of programs. Estimates of both costs and benefits are relative to those that would otherwise have been incurred had "baseline" or "standard" equipment, building systems and/or energy using practices been purchased or remained in place. A measure, program, or portfolio is considered cost-effective if the benefit-cost ratio is 1.0 or greater.

TRC, in collaboration with the Center for Green Building of the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, conducted a cost-benefit analysis ("CBA") of FY19 for residential, commercial, and industrial NJCEP EEP.

Cost-Benefit Tests

Benefit cost ratios for each of the five traditional cost-effective tests were developed. The five tests are: Participant Cost Test, Program Administration Cost Test, Ratepayer Impact Measure Test, Total Resource Cost Test and Societal Cost Test.[36]

Participant Cost Test: The measure of the quantifiable benefits and costs to the customer attributed to participation in a program. The participant benefits are equal to the sum of any participant incentives paid, any reductions in bills, and any federal or state tax deductions or credits. Participant costs include any out-of-pocket costs associated with the program.

Program Administrator Cost Test: The costs of a program as a resource option based on the costs incurred by the program administrator (including incentive costs), excluding any costs incurred by the participant. The benefits are the avoided supply costs of energy and demand and the reduction in capacity valued at marginal costs for the periods when there is a load reduction. The costs are the program costs incurred by the administrator, the incentives paid to the customers, and the increased supply costs for the periods in which load is increased.

Ratepayer Impact Measure Test: Measure of what happens to customer bills or rates due to changes in revenues and operating costs caused by the program. The benefits equal the savings from avoided supply costs, including the reduction in capacity costs for periods when load has been reduced and the increase in revenues for periods in which load has increased. The costs are the program costs incurred by administration of the program, the incentives paid to the participant, decreased revenues for any periods in which load has been decreased and increased supply costs for any periods when load has increased.

Total Resource Cost Test: The costs of a program as a resource option based on the total costs of the program, including both the participants' and the utility's costs. This test represents the combination of the effects of a program on both the participating and non-participating customers. The benefits are the avoided supply costs, federal tax credits, and the reduction in generation and capacity costs valued at marginal cost for the periods when there is a load reduction. The costs are the program costs paid by the utility and participants plus the increase in supply costs for the periods in which load is increased.

[36] California Standard Practice Manual. Economic Analysis of Demand-Side Programs and Projects. (October 2001).

Societal Cost Test: Attempts to quantify the change in the total resource costs to society as a whole rather than only to the utility and its ratepayers. Costs include all consumer, utility and program expenses. Benefits associated with the societal perspective include avoided power supply costs, capacity benefits, avoided transmission and distribution costs, and emissions savings. It has been assumed that wholesale electricity prices account for the national sulfur dioxide and nitrogen oxide allowance. Therefore, the societal cost test includes only emissions savings accrued from carbon dioxide. Federal tax credits are not included.

The table below includes the results of the benefit cost modeling.

NJCEP FY21 (Oct - Jun) Prospective Benefit Cost Analysis					
Program/Budget Line	***PCT***	***PACT***	***RIM***	***TRC***	***SCT***
EE Programs	8.2	3.8	0.3	2.1	3.1
Res EE Programs	13.8	5.4	0.3	3.1	4.6
Residential Existing Homes	1.6	0.7	0.3	0.4	0.4
HPwES	0.9	0.3	0.2	0.2	0.2
HVAC	3.7	1.4	0.4	1.1	1.2
RNC	2.3	1.0	0.3	0.7	0.8
EE Products	25.7	10.8	0.3	5.8	8.6
C&I EE Programs	3.4	2.3	0.4	1.2	1.7
C&I Buildings	3.4	2.9	0.4	1.3	1.7
C&I Retrofit	3.5	3.9	0.4	1.4	1.9
C&I NC	7.5	1.4	0.3	1.1	1.6
P4P EB	3.4	2.3	0.4	1.2	1.6
P4P NC	4.3	0.7	0.2	0.7	1.1
LEUP	2.7	1.6	0.3	0.8	1.1
Customer Tailored	5.2	5.4	0.5	2.4	3.2
LGEA	0.0	0.0	0.0	0.0	0.0
DI	3.3	1.2	0.3	1.1	1.5
Distributed Energy Resources	0.5	0.9	0.3	0.2	0.2